



ESTABLISHED 1859.

Subscription: Fourpence a Week, Ten Shillings a Year.  
Summer and Winter Numbers 1s. per Copy.

CHIEF OFFICES: 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES: 231 ELIZABETH STREET, MELBOURNE,  
VICTORIA, AND EMPIRE CHAMBERS, YORK STREET,  
SYDNEY, N.S.W.

**As an Official Journal**

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—

Pharmaceutical Society of Ireland.  
South African Pharmaceutical Association.  
Pharmaceutical Society of Natal.  
Central Pharmaceutical Association of N.Z.  
Otago Pharmaceutical Association.  
Pharmaceutical Society of Queensland.  
Pharmaceutical Society of South Australia.  
Pharmaceutical Society of Western Australia.

**CONTENTS: Vol. XLIX. No. 7.**

	PAGE		PAGE
Anti-Diphtheritic Serum and its Preparation .....	290	Gazette .....	234
Bankruptcies and Failures ....	283	Irish News .....	274
Corner for Students .....	272	Legal Reports:—	
Correspondence .....	297	An Unregistrable Dental	
Legal Queries .....	299	Qualification; Manufacture	
Miscellaneous Inquiries .....	299	of Artificial Camphor; Sale	
Information Wanted .....	300	of Food and Drugs Act	
Information Supplied .....	300	Prosecutions .....	281
Deaths .....	284	County Court Cases; A Com-	
Deed of Arrangement .....	284	pany Chemist's Transac-	
Editorial Comments:—		tions .....	282
The Parliamentary Session ..	286	Marriages .....	284
Anti Anti-Cutters .....	287	New Companies .....	279
Forest-produce of British		Parliamentary News .....	279
Guiana .....	287	Personalities .....	292
English News .....	273	Pharmaceutical Society of Ire-	
Foreign and Colonial News ....	277	land .....	280
French News .....	275	Scotch News .....	275
From the Venezuelan Frontier	291	Trade Notes .....	285
		Trade Reports .....	293

**EDUCATIONAL NUMBER.**

THE Educational Number of THE CHEMIST AND DRUGGIST will be published on September 5. It will contain full information in reference to the courses of instruction for qualification in pharmacy, medicine dentistry, veterinary surgery, &c. This is a compilation which is referred to all through the year. Secretaries of schools are requested to send prospectuses, &c., to the Editor as early as possible. Advertisements of schools, books, and scientific apparatus should be arranged for with the Publisher.

**“VETERINARY COUNTER-PRACTICE.”**

WE have recently published a new edition of this work. It has been thoroughly revised, enlarged in some chapters, and more than a hundred new prescriptions included in it. The price remains the same—3s. 6d., or by post 3s. 9d. It can be obtained from the leading wholesale and sundries houses at the published price.

**Summary.**

MR. GLYN-JONES replies to the letter of the agent of the Carter Medicine Company (p. 293).

THE report of the Pharmaceutical Society of the South African Republic is given on p. 278.

DR. STEVENSON gave evidence in regard to the employment of boracic acid for the preservation of milk (p. 281).

THE marriages of two past students who have taken special honours at Bloomsbury Square are announced (p. 284).

LEGAL actions in regard to lemonade-powder labels, an artificial-camphor process, and under the Dentists Act are reported on page 281.

ITEMS of pharmaceutical interest from Brazil, Germany, Hungary, Italy, Portugal, the Transvaal, and the United States will be found on pp. 277 and 278.

A WRITER who signs himself “Amicus Curiae” undertakes the defence of the proprietors of medicines who do not see their way to protect chemists' profits (p. 297).

WE publish on p. 290 the paper on the preparation and testing of anti-diphtheritic serum which was read before the British Medical Association by Dr. T. J. Bokenham.

THE Federation of Local Pharmaceutical Associations held its annual meeting at Liverpool during the Conference session. A report of the proceedings is given on p. 274.

THE London Chamber of Commerce appears to be inviting other Chambers to protest against the prosecutions for selling peas and other vegetables containing copper (p. 275).

SOME historic details connected with the foundation of the Paris Society of Pharmacy are given by our French correspondent, as the result of an interview with M. Planchon (p. 275).

THE drug contract system in Ireland was severely criticised in the Irish Pharmaceutical Council last week (p. 280). A particular case has been condemned by the Irish Local Government Board (p. 274).

THE correspondence between the London Produce-brokers' Association and the Drug Club relative to the proposed alteration of the arbitration clauses in contracts for produce is published in full on p. 296.

INFORMATION concerning the Metric Measures Bill, the Vaccination Commission, the report of the Companies Bill, and Sir John Lubbock's proposed resolution in regard to shops early closing will be found on p. 279.

DR. H. H. RUSBY, of New York, is back again in the States from an exploring journey in Venezuela and Guiana. He was botanist to the expedition which was sent out in the interest of an American Land Syndicate (p. 291).

A LETTER from Mr. Jesse Boot, explaining and defending his action in regard to Scott's pills, appears on p. 291. Messrs. Boot's (Limited) have modified the form of label which they attach to boxes of Scott's pills (p. 273).

ONLY forty-three candidates competed in our Corner for Students this month, and of these only twenty-seven sent in reports. Six of them failed to detect mercuric chloride, which constituted one-fifth of the sample sent them (p. 272).

THE holiday season is now at its height, and this partly accounts for the extreme quietness of the drug and chemical markets. Our trade-report pages bear witness to this dulness, for they announce very few price-fluctuations (p. 293).

MR. JESSOP, of the Liebig's Medicated Wine Company, the Goodall Drug Company, Bradford, and still, we believe, the managing director of the Chemists' Co-operative Society, has had to undergo a severe cross-examination in regard to his financial position (p. 282).

THE Irish Privy Council has refused to sanction the regulation passed by the Council of the Pharmaceutical Society of Ireland, the effect of which would have been to prevent the certificates of the “First” examination of the British Society being accepted in lieu of the Irish Preliminary (p. 280).





CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

#### QUALITATIVE ANALYSIS.

THE subject of the next exercise in qualitative analysis will be a mixture of not more than three salts. The mixture is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Wednesday, August 19, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, August 23. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

#### REPORTS.

The powder distributed for analysis last month consisted of 1 part of mercuric chloride, 2 parts of copper sulphate, and 2 parts of zinc sulphate. Its calculated composition was—

Hg	..	..	..	..	..	14.76
Cu	..	..	..	..	..	10.16
Zn	..	..	..	..	..	9.66
SO <sub>4</sub>	..	..	..	..	..	23.78
Cl	..	..	..	..	..	5.24
H <sub>2</sub> O	..	..	..	..	..	32.00
						<u>100.00</u>

The only impurity was a minute trace of iron.

Samples of the mixture were sent to 43 applicants, and in reply twenty-seven reports of analyses were sent in. Copper and the sulphuric radicle were detected by all our correspondents, but zinc was not detected by 9, while there were 6 failures in the detection of mercury, and 2 in the detection of chlorine.

When a small portion of the powder was heated in a bulb-tube or a glass tube closed at one end, water of crystallisation was evolved and condensed on the sides of the tube; the reaction of this water was strongly acid. The next change observed was the production of copious fumes, and the condensation of a white sublimate. On examining this sublimate with a lens it was seen to be crystalline. With a little care it was possible to cut the tube so as to separate the part containing the sublimate from that containing the residue left after ignition. On detaching some of the sublimate, mixing it with anhydrous sodium carbonate, and igniting it in a small quill-tube closed at one end, globules of mercury condensed, thus showing that the volatile part of the powder was a compound of mercury. The white sublimate might have been a arsenical compound or some salt of ammonia: in either case ignition with sodium carbonate would have afforded a distinctive reaction.

On mixing the residue from the ignition of the original powder, as above described, with a little sodium carbonate, and heating the mixture in the reducing flame, on charcoal, an incrustation was produced on the charcoal. This incrusta-

tion was yellow while hot, and on cooling it became white, thus indicating zinc. Minute beads of copper were easily recognised in the fused mass. These simple operations afforded proof of the presence of copper and mercury, and of the probable presence of zinc. With this information to start with, there was no great difficulty in arriving at correct results by the subsequent analysis in the wet way.

#### PRIZES.

The First Prize for the best analysis has been awarded to

ERNEST OSBORNE, 137 Broad Street, Birmingham.

The Second Prize has been awarded to

J. J. BRYANT, care of Mr. Naylor, 33 Southwark Street, S.E.

#### MARKS AWARDED FOR ANALYSES.

E. Osborne (1st prize) ..	100	Rhutra ..	..	83
J. J. Bryant (2nd prize) ..	99	Salol ..	..	80
C. Ivory ..	98	Buxtona ..	..	80
Galea ..	96	Rita ..	..	78
Constant ..	96	Phycosanthin ..	..	77
W. G. S. ..	95	Panax ..	..	76
Cumbriana ..	95	Pro re Nata ..	..	75
Thorough ..	95	Rex ..	..	73
A. J. P. ..	95	Ne Men Veut Pas ..	..	70
Felspar ..	94	Rbel ..	..	70
E. Ockenden ..	92	Lilac ..	..	45
J. Hackett ..	90	Myristice ..	..	30
H. W. J. Browne ..	90	Cytos ..	..	25
Extractum ..	85			

#### TO CORRESPONDENTS.

**Prizes.**—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

**Note.**—All communications should include the names and addresses of the writers.

**EXTRACTUM.**—The coloration of the alcohol-flame is quite inapplicable as a test for boric acid in the presence of copper salts. Cupric chloride especially is very soluble in alcohol, and the solution burns with an intensely green flame. Copper was the cause of the green coloration you observed. The heavy metals should have been removed by boiling with sodium carbonate before testing for the acids. The turmeric reaction should always be tried as a confirmatory test for boric acid.

**RHUTRA.**—You failed to precipitate the whole of the copper, and probably precipitated most of the zinc with sulphuretted hydrogen. A very little copper sulphide would suffice to colour a great deal of zinc sulphide so as to completely disguise it.

**SALOL.**—You were quite mistaken about the results of fusion with sodium carbonate and nitrate—it did not yield a green mass; the mass was black, and on adding a great excess of sodium carbonate and again fusing, no trace of green was perceptible.

**BUXTONA.**—The precipitate you obtained with sodium phosphate must have been zinc phosphate. It is strange you did not succeed in precipitating the zinc with ammonium sulphide.

**RITA.**—The incrustation you observed when the powder was heated on charcoal was yellow while hot, it became white on cooling, indicating zinc. You should not have passed over the incrustation without making an attempt to account for it.

**PHYCOSANTHIN.**—The powder being soluble in water, and containing a salt of mercury and a salt of copper, neither an arsenite nor an arsenate could have been a constituent of the mixture. Copper sulphide is sufficiently soluble in ammonium sulphide to impart a distinct brown tint to the sulphur that separates when an acid is added.

**PANAX.**—When the powder was heated in a tube a considerable sublimate formed; it was white and crystalline, and could only have been due to a very limited number of substances, each capable of easy recognition.

**PRO RE NATA.**—The powder dissolved easily in water, and the solution was almost perfectly clear, considering that a sulphate was present; lead, in any appreciable quantity, must have been absent.

**REX.**—When the sulphuretted-hydrogen precipitate was treated with ammonium sulphide, and the liquid filtered, the filtrate did not give a yellow precipitate on adding dilute hydrochloric acid; the precipitate was nearly white, with a faint tinge of brown, due to a trace of copper sulphide, the latter compound being slightly soluble in ammonium sulphide.

**NE MEN VEUT PAS.**—It was a great mistake not to notice the abundant white crystalline sublimate produced on heating in a bulb-tube.



**RHEI.**—The examination in the dry way required much more attention. The three metals could be detected by very simple blowpipe operations, using about one-twentieth of the powder you received. See remarks to "Rex."

**LILAC.**—You entirely omitted a very important part of the analysis—the examination in the dry way.

**MYRISTIC.**—You would not have encountered any difficulty in the detection of chlorine if you had first separated the heavy metals by heating the powder with sodium carbonate.

**CYTOS.**—You must not omit to send your name and address with each communication. The few tests you applied cannot be described as an analysis of the powder. If the work is worth undertaking at all, it is worth doing thoroughly.



*The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.*

#### An Unqualified Druggist's Suicide.

On August 7, a travelling hawk called to make a purchase at the shop in Burton Street, Gloucester, where Mr. W. M. Davis carried on business as a druggist under the style of Davis & Co. There being no one there he knocked, and Mrs. Davis came from a room at the rear of the premises. She was surprised to find her husband was not in the shop, and called for him. There was no reply, and on search being made she was horrified to find his body hanging in a cupboard at the foot of a staircase, he being suspended by a rope from a nail. Neighbours rushed in, and the body was cut down. It was still warm, and according to one of those who held deceased he gave a kind of gasp; but despite efforts to restore animation, two doctors who arrived on the scene could only pronounce him dead. A few months ago Mr. Davis, while occupying premises in another part of the city, had small-pox in his house, and two years ago he was ordered to pay 15*l.* and costs, having been proceeded against in the County Court by the Pharmaceutical Society for trading as a chemist and selling poisons. It is presumed that these things prejudicially affected his business, and, consequently, his mind, though he had, so far as is known, given no indication of mental derangement or intention of taking his life. He leaves a widow and two children. At the inquest held on Saturday last it transpired that he had been much pressed by creditors lately. The jury found that he committed suicide while temporarily insane.

#### The Unqualified Practitioner.

At an inquest held at York on August 6, in reference to the death of an illegitimate child named Ernest Myers, aged 5 weeks, Thomas Campbell McCormac, who described himself as a medical student, said he attended the mother of the child, and did not tell her he was not a properly qualified medical man. He saw the deceased three times. The cause of death was debility and diarrhoea, and the diarrhoea was due to malnutrition arising from the child's debility. He gave the certificate produced. The form which he signed was not the modern form. He got it from some printers in Exeter. The Coroner expressed his regret that Mr. McCormac was not a qualified medical man, and informed him that he had no right to allow people to employ him under the belief that he was a qualified medical man. The certificate which he had signed was not in the form now in use, and he must have known that a certificate of death could only be given by a qualified man. It would be his duty to report to the Registrar-General as to the certificate.

#### Corrosive Sublimate for Carlsbad Salts.

Mr. James Mawdsley Currey, a Liverpool gentleman of no occupation, aged 44, had suffered for years from general debility, for which he had been constantly under medical treatment. He was very shortsighted and absent-minded. He kept

in his medicine-cabinet in his room Carlsbad salts and perchloride of mercury, the latter of which he used for killing insects on plants. Recently he took some of the perchloride of mercury by mistake for the salts owing to his short-sightedness. He became very ill, and died six days later. An inquest was held on August 7, when a verdict of death from misadventure was returned.

#### An Oil-cask Transaction.

Michael Kearney stole two petroleum-barrels, valued at 8*s.*, from the premises of Mr. Ball, of Lord Street, Southport, and sold them the same day to a cooper for 5*s.* He elected to do seven days in prison rather than pay 10*s.* fine; but he thought it hard that the three days he had already spent in gaol should not count as part of his sentence.

#### Carbolic-acid Poisonings.

Harriet Corbett (30), of Birkenhead, housekeeper to a butcher, committed suicide with carbolic acid on Saturday last.

Ann Atherton, a married woman of Birkenhead, is another victim of carbolic acid. She committed suicide with it on Monday last.

Edward Mansfield (38), plumber, of Chichester, who had been much depressed, committed suicide with carbolic acid on Saturday last.

Beatrice Charlotte Wilkinson (42) was found dead in Newsham Park, Liverpool. She had evidently taken carbolic acid and then thrown herself into the water.

Mary Anne Bispham (18), a mill-worker, of Bolton, poisoned herself with carbolic acid on Monday, apparently in consequence of being stopped in her work by the overlooker.

Mr. Joseph Steadman (50), a silk merchant, of Wood Street, London, E.C., took carbolic acid at his office in the City on August 6. A letter was on his desk from a solicitor threatening to apply for his committal on a debt of 7*l.* 10*s.*, and across it he had written to his wife to say he could not stand the constant pressure.

#### Chemists at their Ease.

The employés of Messrs. T. Morson & Son travelled from Summerfield Works, Hemerton, on Saturday last, August 8, by brake to Elstree, Herts. They had a very pleasant drive of three or four hours, and arrived at the Plough Hotel, Elstree, by 12.45. A substantial dinner awaited them, and was duly disposed of. After dinner the manager, Mr. Harrison, proposed "The Health and Prosperity of the Firm," which was cordially received. The party spent the remainder of the day in various amusements, tea was served at 6 P.M., and home was reached about 11.30.

#### Boots on Anti-cutting.

Messrs. Boots (Limited) are advertising this week "More About the Chemists' Ring." The matter is more important to the public, they say, than appears on the surface. There is danger, they proceed, not only of drugs but also of groceries being advanced, and the simplest way of breaking up this ring is for the public to refuse now, before the movement spreads, to buy any article which is taken up by the ring. A list of such articles is kept by Messrs. Boots at their establishment.

Messrs. Boots (Limited) have changed the style of the label which they stick round each box of Scott's pills which they sell (see *C. & D.*, August 8, page 241). They do not now recommend any particular preference to these. Their present label reads:—

**Important Notice.**—Every buyer of Dr. Scott's Pills from BOOTS should know why the price has been raised—READ ROUND THE BOX. The makers of these Pills having joined a RING to force up prices, they will not allow them to be sold under 1*s.* per box, otherwise BOOTS, the Cash Chemists, would gladly sell at less. This being so, BOOTS strongly urge the public not to give 1*s.* for them. There are 3 other medicines for Liver and Bile Complaints, not prepared by ourselves, which have 10 to 25 times as large a sale as Scott's Pills, and we have no interest in recommending these except that the makers leave us free. By submitting to the maker's terms we should make six times as much profit in selling Scott's Pills as we do on these other remedies.

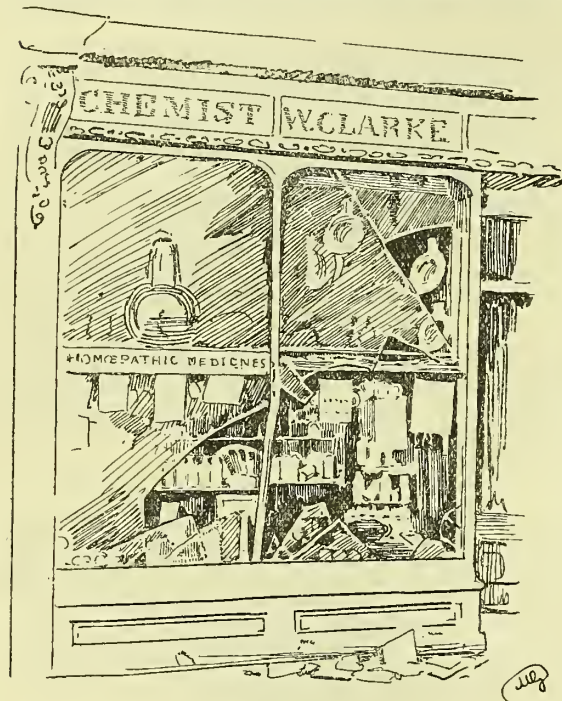
BOOTS, Cash Chemists, trust the people will support their endeavour to keep out of the embraces of any ring formed to force up prices.



They also wrap up with each box of Scott's pills sold by them a circular, entitled "Boycotting in the Drug-trade Most important to the users of Scott's pills." In this they give their version of the anti-cutting movement, quoting the remark of "a prominent member of the ring" at a meeting of the trade, "that under the present system (that is, our system) nobody benefits *except the public*" This they claim to be a splendid testimonial to their system.

#### The Bull's Visit.

Why bulls always rush at chemists' shops when they get frightened or wild in the streets has never been fully explained, but there has been a generally accepted theory that they are attracted by the coloured bottles. The bottom has, however, been knocked out of that idea by the last occurrence of the kind, which took place at Stockton on August 5. In this case the animal's head was wrapped in a sack, and consequently it could not see where it was going; but, just the



same, it ran straight into the shop-window of Mr. Wm. Clarke chemist, completely smashing one plate of glass and cracking the other, and doing considerable damage to the stock. Backing out with a cut and bleeding head, the beast, frantic with pain, rushed up the roads, and, having smashed another window on the way, reached the railings in front of Dr. Jameson's residence. Perhaps the name on the door-plate was suggestive. Anyway, after a moment's thought, the bull made a rush for the railings, and completely pulled down the whole line of them. Soon after it was shot by a revolver.

#### Federation of Local Pharmaceutical Associations.

The annual meeting of the above Federation was held at the Adelphi Hotel, Liverpool, on Tuesday evening, July 28, the following associations being represented, viz.:—Glasgow and West of Scotland by Mr. W. L. Currie; Liverpool Chemists', Mr. Conroy, F.C.S.; Liverpool Pharmaceutical Students', Mr. T. S. Wokes; Midland Pharmaceutical, Mr. R. D. Gibbs; Midland Pharmaceutical Assistants', Mr. C. Thompson; Plymouth Pharmaceutical, Mr. C. J. Park; Manchester Pharmaceutical, Mr. H. Kemp; Cambridge Pharmaceutical, Mr. Peck. Dr. Symes, Mr. J. Rymer Young, and Mr. Rutherford Hill were also present. Mr. H. Kemp (Chairman) presided. In the unavoidable absence of the Hon. Secretary, the late Hon. Secretary, Mr. C. Thompson, read the minutes and annual report and balance-sheet, both of which were (after some little discussion and slight

alteration) adopted, and ordered to be entered on the minutes. The report showed that eleven associations had joined the Federation, and several others would probably join shortly. The following officers were elected for the ensuing year, viz.:—Chairman, Mr. W. L. Currie; Hon. Secretary and Treasurer, Mr. T. S. Wokes, Grassendale, Liverpool, to whom all communications must be addressed. A vote of thanks having been passed to Mr. R. Glode Guyer for his services during the past year, a long and animated discussion took place on the following subjects, viz.:—(1) The future work of the Federation; (2) Sir John Lubbock's Early-closing Bill; (3) Lord Herschell's amendment of the Companies Bill. The result of the discussion was an almost unanimous feeling in favour of both the Early-closing Bill and the amendment of the Companies Bill.



The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

#### Personal.

A new medical hall has been opened at Mountrath, Queen's County, by Mr. John Robson, L.P.S.I.

Mr. M. R. Nugent, L.P.S.I., lately of Limerick, has been appointed apothecary to Croom, Union county Limerick, and has also opened a medical hall there.

The library of the late Dr. Corry, proprietor of the medical hall, Belfast, consisting of 10,000 volumes of rare and valuable books, was last week sold by public auction.

#### Apothecaries' Hall.

At the annual meeting of the Governors and Council of the Apothecaries' Hall of Ireland, held at Mary Street, Dublin, on August 1, the following members were elected officers for the ensuing year:—Governor, Sir Robert Jackson, C. B.; Deputy-Governor, J. Raverty; Directors: H. Auchinleck, W. V. Furlong, John Evans, Robert Montgomery, R. J. Montgomery, Charles J. Moore, L. Lucas, R. J. O'Flaherty, Sir George Owens, J. A. Stritch, J. Shaw, and C. R. C. Tichborne; Representative on General Medical Council and Consulting Chemist, C. R. C. Tichborne; Secretary, R. Montgomery.

#### The Medicine contract in Mullingar Union.

The Local Government Board have communicated the report of their inspector, Dr. Stafford, to the Mullingar Board of Guardians on the medical contract. The points inquired into were (1) the acceptance of a tender from a local house without opening the envelopes containing tenders from other firms; (2) the loss resulting from the Guardians' action in the matter; (3) the failure of the medicine-contractor to supply drugs upon the authorised list at the current wholesale price, in accordance with the terms of the Board. Having regard to the gross system of over-charging which has been practised, the board have come to the conclusion that Messrs. English ought not to be entrusted with the supply of medicines. The Board accordingly request the Guardians to give notice to the contractor to terminate the contract, and to advertise for tenders for a supply of medicines to the union. They also request that the Clerk may be seriously admonished to check in future the extra list of drugs supplied with a wholesale price-list. At the meeting of the Guardians on August 6, the Clerk said he had compared the bills for medicines and the tender with the extra list accepted by the Guardians, and they were correct. If the Guardians accepted a list that they ought not to accept, he could not help them. The consideration of the report was postponed for a fortnight.





## Scotch News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

### Tinned Green Peas.

At the monthly meeting of the directors of the Glasgow Chamber of Commerce on August 10, a letter was read from the London Chamber of Commerce, which contained a copy of a circular addressed to the Chambers of Commerce in France and Italy in regard to prosecutions that had taken place in this country for the sale of green peas and other vegetables treated with sulphate of copper to preserve their freshness. A very large trade, it was pointed out, had been done in them. The prosecutions had taken place at the instance of the local authorities, their contention being that the peas were injurious to health. The result was that dealers were giving up the trade rather than risk prosecutions. The circular contended that the cases tried before the Courts failed to show that the articles were injurious to health, and the London Chamber of Commerce asked the Glasgow Chamber to protect the trade by supporting a proposal to bring pressure to bear on the Government with the view of removing the hardship from which retailers suffered under the present law, until such time as the proper quantity of sulphate of copper injurious to health was definitely known. After discussion the directors, instead of doing what the London Chamber asked, passed a resolution, proposed by Mr. Nathaniel Dunlop, deprecating the encouragement of the importation from foreign parts of vegetables treated with sulphate of copper which are not similarly permitted to be treated at home.

### Arsenic in the Broth.

At Inverness on Tuesday, before the Lord Justice Clerk, Ellen McLeod or Beaton, 35 years of age, housekeeper at Rheeve's Farm, Alves, Morayshire, was charged with having on Sunday, July 12 last, administered arsenic or other deadly poison, with intent to murder, to Thomas Hay, farmer, and eight other persons whom he had invited to dinner. The accused declined to prepare dinner that Sunday for the kind of folk Mr. Hay had invited to his house. A quarrel ensued, and Mr. Hay got in a neighbour to make the broth. It was averred that Beaton went to a press and procured some rat-poison, which she put into the pot of broth. Mr. Hay and all his guests, immediately after partaking of the broth, were seized with sickness and pains, and the medical attendant who was called in stated that the symptoms of the patients were those accompanying poisoning by arsenic or some other irritant. There was no evidence for the defence; but counsel for the accused scouted the idea that because of a quarrel she would attempt to murder all these persons. The jury, by thirteen to two, found the accused guilty of administering poison with intent to disable, but not to murder, and she was sentenced to fifteen months' imprisonment.

**BRUNNER, MOND & CO. (LIMITED).**—The directors of this company have decided to recommend a dividend at the rate of 30 per cent. per annum on the ordinary shares. The total profits for the half-year were 180,000*l.*, against 162,000*l.* last half-year, and 148,000*l.* in the corresponding period of 1895. Following the ordinary meeting of the company an extraordinary meeting will be held, at which a special resolution will be proposed increasing the capital of the company from 2,000,000*l.* to 3,000,000*l.*, and to take power to issue the balance-sheets annually instead of half-yearly. It is intended to issue 7,906 fully-paid 10*l.* 7-per-cent. preference shares at a premium of 7*l.*, and to offer them to shareholders in the proportion of one new share to every twenty-two now held.

## French News.

(From our Paris Correspondent.)

**THE MARRIAGE** is announced of M. Charles Buchet, Director of the Pharmacie Centrale of France, Chevalier of the Legion of Honour, to Madame Marie Gaudron, of Verdun-sur-Meuse. The event took place on August 1.

**NOT DYNAMITE.**—The inhabitants of the Boulevard de la Gare, Paris, were in a state of commotion a day or two ago, and a report of a dynamite outrage by Anarchists was freely spread. A loud explosion had taken place, and the pavement opposite No. 67 was covered with glass and *débris*. The scene of the accident was the pharmacy there, and it was due to the imprudence of M. Eustache Georges, an assistant pharmacist, who, while making up a prescription, had brought a light into contact with a carboy of alcohol. The explosion was very violent, and the premises took fire, but the flames were quickly extinguished by the neighbouring fire-brigade.

**LAVOISIER'S STATUE.**—At the Paris Academy of Sciences last Monday, reference was made by M. Berthelot to the proposed monument to Lavoisier, concerning which the Academy took the initiative in 1894. The proposal was to erect a statue to Lavoisier as the creator of modern chemistry, and to commemorate the centenary of his execution. A committee has charge of the matter, and subscriptions to the amount of 47,553*fr.* were announced, in which England figures for 3,293*fr.* (say, 131*l.* 10*s.*). It is expected that other subscriptions will be collected, and M. Berthelot announced that he was certain it would be possible to inaugurate a monument worthy of the great *savant* during the Exhibition year of 1900. Mention was further made that the Czar had authorised the opening of a subscription-list in Russia, which he has headed with a sum of 2,000 roubles.

**EASY CREDIT.**—A *soi-disant* vendor of indiarubber stamps seems to have found out a new way of victimising pharmacists. He walks into a shop, offers his wares, incidentally asks to see their stamps, and tries one on a piece of paper, pointing out its imperfections to emphasise the superiority of the stamps he offers. If orders are refused he feigns disappointment; but he has put the stamp at the bottom of a blank sheet. Subsequently he presents that sheet with an order for drugs, &c., above the stamp at some wholesale house, and obtains goods on credit. His ruse has been discovered by the reception by certain pharmacists of invoices for drugs thus ordered. In one case, at least, the ingenuity and audacity of the trickster in question have been rewarded by a supply of goods to the value of 200*fr.* (8*l.*). It seems odd that a wholesale house should thus supply goods to a perfect stranger against an order merely stamped with the name of a pharmacist who was not one of their customers, and it is possible that if the pharmacists refuse to pay, the wholesale houses will not obtain judgment.

**A PHARMACIST CONVICTED OF THEFT.**—In the Paris Court of Appeal a few days ago a pharmacist was implicated as a receiver of stolen goods. The prosecutors were MM. Marchand Père & Fils, wholesale druggists, Paris, and a member of that firm had detected an employé, named Philibert, surreptitiously placing ten bottles of a pharmaceutical speciality in a delivery van. The man acknowledged the theft and said he intended to deliver the goods to M. Segonne, pharmacist. He also implicated a fellow employé named Cellié. On being arrested the latter confessed his guilt, and stated he had stolen goods from MM. Marchand at various times to sell them to the pharmacist. He had, he said, acted in connivance with a certain Lefevre, who, arrested in turn, also avowed his complicity. M. Segonne alone protested his innocence on the ground that he had paid for certain of the goods at their market value; but it was sufficiently proved that he had paid a merely nominal price for the greater quantity of the articles received by him. Philibert and Segonne were sentenced to six months' imprisonment, while Cellié and Lefevre have respectively eight and four months' each.

**SUNDAY CLOSING.**—The pharmacists of Soissons exhibit a notice in each of their pharmacies stating that, "Following



the example of the pharmacists in certain other places, the *offices* of the town will be closed on Sundays and public holidays at mid-day. Each pharmacy will, however, remain open in turn for the purpose of supplying urgent medicines, and the address of such pharmacy will be posted on the doors of all the others." Amongst the towns where this system has worked satisfactorily for some time past may be mentioned Orleans, while at Belfort they have developed the idea somewhat by starting a separate dispensary for supplying medicines on Sundays. The pharmacists bear the expense between them, and each takes charge in turn. The advantage is supposed to be that customers are more likely to remain neutral. Efforts have been made at various times to induce Paris pharmacists to follow a similar course; but the task of forming any kind of an organisation is infinitely greater in the capital, and has not succeeded so far. An attempt was also made some time ago to get all Paris pharmacists to close at 9 P.M. every evening; but this also failed, although the leading English chemists close at that hour, and appear to be quite satisfied with the result. Of course, an assistant remains in charge for the usual night duties.

**THE FRENCH MINISTER OF FINANCE ON CHEMISTRY.**—At the Chemistry Congress banquet, at the Grand Hôtel, Paris, last week, M. Cochery, the French Minister of Finance, occupied the chair. In his speech he assured the chemists present of the sympathy of the Government. He pointed out the services rendered by chemistry to his department, adding that, while it is sometimes the accomplice of fraud, it also renders great service in detecting falsifications. "To-day," he said, "chemists have extended their domain. You have become the guides of commerce and the councillors of industry. Each day you add something new to the public revenues and riches. While industrial, agricultural, and hygienic questions especially occupy your attention, you form the link between the researches of the savants and the public, who are above all interested in the results. M. Berthelot is ambitious to one day make you the purveyors of our nourishment. The idea is excellent, but permit me, with the excellent *menu* just provided for us before me, to make some reserves concerning the alimentary chemical pills of the future, in the name of the culinary traditions of our country." M. Cochery then went on to speak of the independent path French chemists have made for themselves.

**PHARMACY STUDENTS.**—The French Minister of Public Instruction contemplates reducing the "stage" or term of service of students in a pharmacy from three to two years, leaving the three years' additional course of studies at a school of pharmacy as it exists at present. Apparently financial reasons are the cause of the projected change, and the idea by no means meets with the approval of French pharmacists. The Paris School of Pharmacy especially is said to be overcrowded, and there is probably a desire to get the students through their course a little more quickly to avoid the expense of providing increased accommodation. The opponents of the scheme say that at the present time even the three years of "stage" is scarcely sufficient for the average student to obtain a practical knowledge of pharmacy. One of the critics of the suggested change proposes as an alternative that another year might be added to the school of pharmacy course, making the term of probation for a pharmacist seven years in all. He adds, "Many young men would not take up a career requiring seven years of preliminary studies and where would be the evil in these times of plethora?"—further, also, suggesting that the fourth year is indispensable as a means of acquiring the scientific instruction now necessary. At present, he goes on, "a pharmacist must be a chemist and a microscopist. Hygiene has made immense progress. Infectious maladies were formerly treated by potions, which are now replaced by serum-therapy, &c. In order to make his diagnosis, the doctor is obliged to have a chemical and bacteriological examination of excretions and secretions made. This is our rôle. Let the coming generation learn to make themselves indispensable by becoming the doctor's auxiliary, and for this a more complete theoretical instruction is indispensable."

**CENTENARY OF THE PARIS SOCIETY OF PHARMACY.**—The allusions made by M. Planchon at recent meetings of the Paris Society of Pharmacy to the centenary of that body

induced a *C. & D.* representative to call upon the director of the School of Pharmacy a few days ago and inquire if no celebration was projected. M. Planchon said he thought not; and pointed out that though the "Société Libre" formed in 1796 was the forerunner and origin of the present Society, this latter only really dates, like the school itself, from the Year XI. (1803) of the first Republic. But, as everyone connected with pharmacy in Paris knows, M. Planchon's hobby is the study of the past of his profession, and a little pamphlet by him has given some interesting details as to what happened just a hundred years ago. On the "30th Ventose, Year IV. of the Republic one and indivisible" (1796), the Reign of Terror being over, sixty-six of the leading pharmacists of Paris, including such well-known names as Parmentier, de Machy, Pia, Bayen, Cadet-Gassicourt, and Bouillon Lagrange, formed themselves into a "Free Society," according to Article 300 of the Constitution, which society Vauquelin joined later. This association had a two-fold object. On the one hand, it was, as now, a periodical afternoon gathering of pharmacists to read scientific papers and discuss various matters interesting their profession. But the old College of Pharmacy, of which most of the pharmacists named had been professors, having practically disappeared, like most other scientific bodies, during the period of massacre and prescription, it was also an educational body. The Directory, by its decree dated 3 Prairial, Year V. (1797), authorised the reopening of the laboratory and garden in the Rue de l'Arbalète under the name of the "Ecole Gratuite de Pharmacie." Trusson, chairman of the Society, became likewise head of the new school, and twelve professors were named, three for each subject—chemistry, pharmacy, botany, and natural history. Their aims and objects and their system of teaching were explained by Trusson at the first meeting of the Society held at the old School of Pharmacy on March 18, 1797. The membership had by this time swelled to 123, besides 49 correspondent and 18 free associate members, these latter including Fourcroy, Darvet, Berthollet, Jussieu (the botanist), Cuvier (the zoologist), &c. In June, 1797, the pharmacists "Journal" first appeared, edited by a committee of which Fourcroy was the leading member. It appeared at irregular intervals till 1800, when it was amalgamated with the "Annals of Chemistry," only to separate nine years later. Examinations were held and prizes awarded, and, in fact, the whole machinery of pharmaceutical education and development was set in motion by this energetic and devoted body. The winner of the first chemistry prize awarded, M. Boullay, was personally known to M. Planchon and the older members of the present Society, as he only died in 1869. A committee was likewise appointed by the Society shortly after its foundation to study the desirability of floating a company for the wholesale manufacture of drugs, the members to be shareholders, and the school laboratory to be employed or extended. M. Delaue, chairman of this committee, was quite a business man, if one may judge from the conclusion of the article on "Tea-growing in France" he published in the journal above referred to, which read: "P.S.—The tea is sold at my pharmacy, Rue St. Honoré at 12*fr.* per lb." This committee reported that certain articles, such as phosphorus, kermes, ammonia, &c., might be produced either more cheaply or in a purer state by large and carefully supervised preparation. But only two medicaments, eau de melisse and the famous electuary "Theriaca," ever seem to have really been prepared and sold at the School of Pharmacy. This latter cost 10*fr.* per lb., and M. Planchon, when speaking on the subject at the Society of Pharmacy about two years ago, showed his colleagues the large padlocked jar bearing the arms of the school, in which it was preserved. This vessel now stands in the museum of the Paris Superior School of Pharmacy as an interesting relic of the past. It may be noted, however, that this commercial experiment was not a success, and it is by its educational and scientific efforts that the "Free Society" will be honoured by French pharmacists.

"CASTOR OIL was recommended, so it was," said the hard-featured woman, "but it's a mighty nasty thing to take, so it is." "I can give you a pleasant vehicle in which to take it, ma'am," said the druggist. "A vehicle, is it? And what's to stop me from carryin' it meself? Do I want a cart-load av it?"



## Foreign and Colonial News.

**A FEAST WITH CONTENTMENT.**—The completion of the twenty-fifth year of Schering's chemical-factory in Berlin as a limited company was celebrated on July 25 by a *fête* at Gruenau, near Berlin, at which the managers, office-staff, and factory-hands were all present.

**COUNTERFEIT GOODS IN BRAZIL.**—The British Consul at Rio de Janeiro states that the adulteration of European mineral waters, spirits, wines, and liqueurs is carried on to an alarming extent in Brazil. Nearly all foreign brands are counterfeited there, and European trade-marks infringed with impunity.

**CASTOR-OIL CULTURE IN HUNGARY.**—A syndicate has been formed in Southern Hungary for the purpose of laying down large castor-oil plantations. Experiments have been made which show that seed can be raised of an especially high oil-content—viz., over 60 per cent. All the castor oil to be produced will for the present be used for industrial purposes only, and no medicinal oil is to be made.

**MERCURY DEPOSITS IN BRAZIL.**—The U.S. Consul at Bahia, Brazil, writes that there exist in his State, near the town of Nazareth, enormous quantities of low-grade ores, containing from 0.1 to 2 per cent. of mercury. A syndicate is now working these mines, Mr. Charles Nack, an American mining engineer of large experience in the Western States and Mexico, acting as manager. Retorts have recently been put up.

**A BRAZILIAN DRUG-FIRE.**—A serious fire occurred recently at Granado's drug-store, 8 Rua Primeiro de Março, Rio de Janeiro, where some assistants were engaged in compounding a patent medicine. The establishment was totally destroyed, and several of the adjoining buildings damaged. The total loss is estimated at \$1,000,000. Granado's business was insured for \$400,000. Five firemen and four other persons were wounded.

**THE GREENLAND FISHERIES.**—There is a pretty big trade in seal, whale, and other oils between Greenland and Denmark. Eight specially built sailing-vessels and one steamer are engaged in the business. The steamer makes three voyages yearly, the sailers one or two. On an average 9,300 barrels of seal oil and 240 barrels of other train oil are imported annually. The "Greenland Department," which imports the oil, is said not to trade directly with foreign markets, and the oil is sold by auction at Copenhagen.

**A DOCTORED MINERAL WATER.**—Apotheker H. Kracht, of Berlin, director of the Queen Louisa mineral-water spring, has been condemned to a fine of 100m. and the publication of the judgment for selling an artificially-prepared mineral water for a natural article. The so-called Queen Louisa spring appears to be without any mineral properties, and yields ordinary spring-water only. This was prepared into the article offered for sale by the apotheker by the addition of bicarbonate of soda and ordinary salt.

**GOOD WILL AMONG DOGS.**—A black-and-tan terrier got under the wheels of a tramcar at Dunedin the other day. A St. Bernard dog belonging to Mr. P. Dutton, chemist (opposite whose shop the accident occurred), attracted by the little dog's cries, ran up, pulled it from under the car, laid it on the footpath, rushed across the street and threw itself with a bang against Mr. Dutton's closed door, thus attracting attention. The St. Bernard then ran back again, and picking up the terrier in its mouth brought it to the shop, where it received attention. The lower part of one leg was crushed, and half the foot had to be cut away.

**NEW VANADIUM DEPOSITS.**—An important source of vanadium has been discovered in the South American Andes, at a height of 16,000 feet. The vanadium occurs in an anthracite mine, of which the coal burns easily, leaving about 2 per cent. of ash. This ash contains from 14 to 25 per cent. by weight of vanadium, besides some silver, with traces of zirconium and platinum. M. K. Héroult has applied this vanadium to the preparation of aniline black, to the colouring of porcelain, and in metallurgy, and the vanadium used by M. Moissan in the preparation of vanadium carbide also came from this Andean source.

**PROPRIETARY ARTICLES IN ITALY.**—A circular has been addressed to the Italian Custom-house by the central authorities, in which it is pointed out that proprietary articles of which the formula is kept secret may only be imported with the express consent of the Superior Council of Health in Rome, but that such substances of recent introduction as possess therapeutic properties which are inherent in those substances alone may be imported, although their ingredients need not be stated. The Customs officers are instructed to allow the importation of all specialties of which the formula is indicated on the packet, on the condition that the formula shows the article to be composed entirely of substances which are contained in the Italian Pharmacopœia. These regulations do not apply to small quantities of medicines imported for their own use by travellers.

**THE INTERNATIONAL PHARMACEUTICAL EXHIBITION AT PRAGUE.**—One of the finest things in pharmaceutical posters ever published has been issued in connection with the approaching pharmaceutical exhibition which opens on August 15. The poster represents the figure of Hygeia bearing a book in the right hand and the traditional cap and snake in the left, which points towards the exhibition buildings. It is executed in twelve colours, and is the work of Herr Spillar, a painter of note. Copies of the poster are offered for sale at 2s. each as a memento. The exhibition will be opened daily from 9 A.M. to 7 P.M., and the grounds from 9 A.M. to 11 P.M. The principal entrance will be decorated with a design in which the national colours of all countries taking part in the exhibition are blended. These countries are Austro-Hungary, Belgium, Germany, Italy, France, Spain, Switzerland, Portugal, Russia, Holland, Great Britain, Denmark, Norway, Roumania, Bulgaria, Greece, United States of America, Japan, and China.

**FLOWER DISTILLING IN FRANCE.**—The cultivation of flowers, both as cut-flowers for export, and as material for the perfumery-factories of Grasse, is one of the most paying forms of agriculture on the Riviera. In addition to large quantities of lavender, jasmine, and other flowers, the following quantities of the leading perfume-materials were consumed in Grasse in 1894 and 1895 respectively:—

		Jonquils	Roses	Orange-blossoms	Violets
1894	.. cwt.	280	220	3,300	1,100
1895	.. cwt.	300	180	3,200	1,000

Sixteen different kinds of flowers are cultivated only for this purpose in the department of the Maritime Alps. The lavender is a semi-wild plant, found in large quantities in the mountains, especially near Sospel, Lascram, and Lantosque.

**PRIVATE v. GOVERNMENT CINCHONA-PLANTATIONS IN INDIA.**—Some time ago the United Planters' Association of Southern India passed a resolution in which it was represented that the Government should obtain its bark from private owners instead of replanting the existing plantations or purchasing new estates. It was incidentally stated that a promise that such a course should be followed was given by Sir M. E. Grant Duff, when Governor of Madras. The reply of the Government, which has just been made public, is a snub for the Association. It denies that Sir M. E. Grant Duff made the promise referred to, and proceeds: "In any case, the Association overlooks the fact that circumstances have materially altered since 1882. The cinchona-industry has languished for a considerable period, and, so far as the Government is aware, no large areas have been planted up of late years by private owners. On the other hand, it has been decided in the interest of the general population that Government should itself take active steps to secure the production of quinine at a cost sufficiently low to admit of its being widely disseminated in a suitable form amongst the poorer classes throughout the Presidency, and especially in malarious tracts. Such dissemination would be impracticable if the Government merely purchased cinchona-bark from private owners or bought quinine in the open market. In these circumstances, His Excellency in Council does not consider that the United



Planters' Association has any reasonable ground for complaint, and he is unable to accede to the request which it makes."

**THE GERMAN CHEMICAL INDUSTRY.**—The chemical-factory "Harburg" at Stassfurt report that the sale of their principal article of manufacture—viz., refined saltpetre—has declined by about 5 per cent. during their last business year as compared with the year 1894-95. Since July, 1895, the factory has entirely stopped the manufacture of refined camphor, because the price of the raw material was forced up to a figure at which the refined article left no profit. Owing to the Spanish-German tariff war, the exports of the factory to Spain fell from 222 tons in 1894 to 122 tons in 1895. The chemical-works "Buckau," in Magdeburg, are about to lay down plant at their Stassfurt works for the manufacture of ammonia salts. Many other German potash-factories are also taking up the manufacture of new articles. This applies particularly to the manufacture of caustic potash for scampmakers' use, for which several new plants have been put down. Up to the present caustic potash is made chiefly by the chemical-works at Griesheim, their branch factory at Bitterfeld, and the electro-chemical factory, also at Bitterfeld. All these works appear to make a considerable profit out of the article, small quantities of which (all of excellent quality) are also made by the United Chemical-factory at Leopoldshall. All of this, however, is at present used by the factory for its own consumption, but the commercial production of the article will be discussed at the next general meeting. The Leopoldshall works have recently purchased the prussiate and cyanide of potash factory of Schachnow & Wolff, and they are also considering the erection of a special factory for chromate of potash.

**PROPOSED NEW CUSTOMS TARIFF IN PORTUGAL.**—After having revised her Customs tariff in a protectionist manner in 1894, Portugal now proposes to take another step in the same direction. We subjoin particulars of the existing (1894) tariff and the proposed new tariff (which has still to be discussed by the Portuguese Parliament), so far as drugs and chemicals are concerned:—

Articles	Amount	
	Present Duty	Future Duty
	£ s. d.	£ s. d.
Sponges .. .. . per kilo.	0 1 2½	0 1 4
Bark for tanning purposes .. ..	0 0 0½	0 0 0½
Cottonseed oil .. .. .	0 0 10½	0 2 2½
Sweet-almond oil .. .. .	0 0 6½	0 0 3½
Oils, fixed, liquid, not otherwise specified .. .. .	0 0 3½	0 0 2½
Oils, vegetable, concrete, not otherwise specified .. .. .	0 0 2	0 0 1
Essential oil of turpentine .. ..	0 0 0½	0 0 0½
Ditto, not otherwise specified .. ..	0 3 4	0 2 8
Quicksilver .. .. .	0 0 0½	0 0 0½
Nitrates of potash and soda .. ..	0 0 0½	0 0 0½
Salts of quinine, hydrochlorate, sulphate, tannate, valerianate, &c. (gross weight) .. ..	0 8 10½	1 15 6½
Sulphate and chloride of potash, and sulphate of copper and of iron .. .. .	0 0 0½	0 0 0½
Colours and dyes, in powder or pieces, not prepared (gross weight) .. .. .	0 0 0½	0 0 0½
Printing-ink .. .. .	0 0 10½	0 0 5½
Lumpblack (gross weight) .. .. .	0 0 5½	0 0 2½
Cocoa, and husks thereof .. .. .	0 0 1½	0 0 4½
Apparatus of copper for distilling and concentrating purposes <i>in vacuo</i> .. .. .	0 0 5½	0 0 3
Sensitised plates for photography (including packaging) .. .. .	0 0 5½	0 0 3½

**AUCTIONING DRUGS IN NEW YORK.**—The stock of the Dietz Drug Company was recently sold at New York by public auction under a Court warrant. There was a large attendance of wholesale druggists, and, says the *Commercial Record*, a representative Hebrew delegation from the vicinity of Wooster Street. This contingent came after bargains, but in a few instances paid dearly for their inability to judge of

quality, one of them paying \$2 50c for balsam fir worth 40c. However, the professional bargain-hunters did well in the long run, and carried off all the chamomile-flowers offered. Goods were frequently knocked down to a buyer named Ratsky. What the regular trade did not want would generally go to Ratsky, and he sometimes competed in the race for certain high-class drugs. The entire sale brought ridiculously low prices, but buyers were particularly interested in a lot of 25 barrels of Norwegian cod-liver oil, which was said to be a "Hamburg mixture." It sold for \$21 per barrel, against regular market quotations of \$53 and \$58 for prime old and new. A lot of 11 barrels of Lofoten cod-liver oil realised \$29 to \$29 50c. per barrel, duty-paid, and is said to be on the market again at \$40. Five cases of German lupulin were sold at 2c. per lb., when actually worth 20c. and regularly quoted at 32c. The following are some of the prices realised:—Barbadoes aloes, ¼c. to 1½c. per lb.; galbanum, 75c.; storax calami a, 1¼c. to 7½c. per lb.; elecampane-root, 1½c. per lb.; henbane-seed, 1c.; red bark, 3¼c.; calisaya-bark, 3¼c.; lavender-flowers, 1c.; cubeb berries, 4¼c.; dandelion-root, ¼c.; calamus-root, 2½c.; powdered Socotrine aloes, 8c.; powdered rose-leaves, 2c.; coca-leaves, 2½c.; aconite-root, 1½c.; fennel seed, 2½ to 3½c.; belladonna-leaves, 2½c.; ditto root, 1¾c.; buchu, 1¼c.; gum myrrh, 3½c.; orange-peel, 4¼c.; yellow-dock root, ¼c.; Tinnivelly senna-leaves, 1½c.; and kouso-flowers, 6½c.

**PHARMACY IN THE TRANSVAAL.**—The "Pharmaceutical Society of the Z.A.R." (Zuid-Afrikaansche Republiek = Transvaal) has struck root, and reached its first anniversary. It has now a membership of fifty-four, and the annual general meeting was held on July 14 at the Goldfields Hotel, Johannesburg. There was a moderate attendance to hear Mr. E. J. Adcock read the annual report, of which the following are the principal features:—The new Concept Law was, perhaps, the most important question with which the Society had to deal during the year, and, after much trouble the committee of the Society drafted a Bill which was more comprehensive, protective, and suitable to the interests of chemists in this State than Law No. 12, 1886. This draft was passed at a general meeting of the Society. Subsequently a deputation, consisting of Messrs. Browne, Klonowski, Peacock, and Adcock, met a deputation from the Medical Board (Pretoria), when the Bill passed by the Society was discussed. The Medical Board committee promised their support to the draft law, and assured the deputation that the Board approved of the Pharmaceutical Society having a representative on the Board of Examiners. The "raid" put an end to the prospects of the Bill, and since that time the matter has been left in abeyance. It is not thought advisable to press the matter until a more favourable time. Numerous prosecutions under the Poisons Law have taken place, whereby several members were fined. Counsel's opinion being adverse to an appeal, the matter was not proceeded with further. The committee of the Society interviewed the Public Prosecutor (Mr. Jacobz), who explained that the prosecutions were only undertaken to show that such a law was in existence, and must be respected. On presenting him with a Cape poisons-book and regulations, and fully explaining the working of same, he assured the committee that, as long as he remained in office, he would not sanction any more prosecutions, provided the sale of poisons were conducted with more care for the safety of the inhabitants. The Transvaal chemists are, therefore, to all intents and purposes as well off now as regards the sale of poisons as those of Cape Colony. The financial statement shows that the Society, in proportion to its age and membership, is literally gorged with wealth. Fifty-four guinea subscriptions constitute the receipts, and, after paying for typing, stationery, counsel's opinion, and translating the Transvaal Pharmacy Law (which is printed in Dutch, the official language) into a lingo understood of the chemists, there is a balance of 43l. 11s. 6d. Under the circumstances, it has been decided to ask for no more subscriptions for the present—probably a unique fact in the history of societies. Mr. E. J. Adcock was elected President in the place of Mr. Victor Browne, Mr. H. Trembath takes the vice-presidential chair, Mr. R. Butters succeeds Mr. Adcock as Hon. Secretary and Messrs. V. Browne, T. Turner, C. Hyland, B. O. Jones, J. R. Jones, von Klonowski, and Phillips form the committee.



## Parliamentary News.

### THE VACCINATION COMMISSION.

THE Royal Commission on Vaccination, presided over by Lord Herschell, held its final meeting on August 7. It has sat over seven years. The final report of the Commission on the whole matter will be in the hands of the public very shortly. The report is very voluminous, and, according to the *Daily News*, may be roughly divided into three parts. Part I. deals with the question exhaustively from an historical and pathological point of view. Vaccination is, on the whole, approved of, but with reservations calculated to cause some astonishment amongst those who have not perused the volumes of evidence already published. This part winds up with a unanimous recommendation that the operation of vaccination should not be insisted upon when a parent makes a written declaration of his objection to it. In Part II. a majority of the Commissioners recommend certain new methods of procedure, transfer of the vaccination business from Boards of Guardians to Sanitary Authorities, use of calf-lymph, &c. In Part III. the minority wholly discountenance any State or public interference with a parent as regards vaccination.

### THE METRIC MEASURES BILL.

THE following are the clauses of the Bill "to legalise the use of weights and measures of the metric system," introduced into the House of Commons by Mr. Ritchie and Mr. Balfour:—

1.—(1) Notwithstanding anything in the Weights and Measures Act, 1878, the use of a weight or measure of the metric system in trade shall be lawful, and nothing in Section 19 of that Act shall make void any contract, bargain, sale, or dealing by reason only of its being made or had according to weights or measures of the metric system. (2) A person using or having in his possession a weight or measure of the metric system shall not by reason thereof be liable to any fine. (3) For the third schedule to the weights and Measures Act, 1878, shall be substituted the schedule to this Act.

2. Section 38 of the Weights and Measures Act, 1878, is hereby repealed, and the Board of Trade shall verify copies of metric standards in the same manner as if they were copies of Board of Trade standards, and the provisions of that Act relating to the verification of local standards shall apply accordingly.

3. In Section 40 of the Weights and Measures Act, 1878, the expression "local standards of weights and measures" shall include local metric standards, and the provisions of that Act relating to local standards shall apply accordingly.

4. This Act may be cited as the Weights and Measures (Metric System) Act, 1896, and may be cited with the Weights and Measures Act, 1878 to 1893.

A schedule to the Bill gives the equivalents of metric and imperial weights and measures.

Mr. Ritchie, in introducing the above Bill, stated that he did so only that the Bill might be printed. The order for the second reading of the Bill has since been discharged.

### SHOPS (EARLY CLOSING).

SIR JOHN LUBBOCK has given notice of the following motion for next Session:—"That, in the opinion of this House, the excessive and unnecessarily long hours of labour in shops are injurious to the comfort, health, and well-being of all concerned; that it is desirable to give to local authorities such power as may be necessary to enable them to carry out the general wishes of the shopkeeping community with reference to the hours of closing; and that the subject demands the serious and early attention of her Majesty's Government."

### THE COMPANIES BILL.

THE Select Committee of the House of Lords appointed to consider the Companies Bill report that they have examined several witnesses. They have been unable to complete the inquiry, and therefore recommend that if the Bill be again introduced the Committee be reappointed.

### A NEW SHOP-HOURS BILL.

ANOTHER Bill on shop hours has been introduced into Parliament by Sir Charles Dilke and other members. It is a measure prepared by the Shop Assistants' Society, and differs from Sir John Lubbock's in the important particular that it is compulsory, and would be applicable to the whole of the kingdom, option being given to the local authorities to vary the times of closing to suit the requirements of each district. The penalties proposed are very severe, including imprisonment in certain cases. It is also intended to provide that the assistants shall not remain in the shops after they are closed.

## New Companies.

UNIVERSAL CATTLE AND POULTRY FOODS (LIMITED).—Capital, 10,000*l.*, in 1*l.* shares. Objects: To adopt agreements with J. G. Geisel, C. Balls, and G. Barratt, and to manufacture and trade in all kinds of cattle, poultry, and pig food products. Table A mainly applies. Registered office, 64 Cannon Street, E.C.

J. M. BROOKES (LIMITED).—Capital 500*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of a manufacturer of and dealer in artificial teeth and other materials used in dentistry, carried on by J. M. Brookes, at 5 The Bulwark, Brecon. James M. Brookes is the governing director. Registered office, 5 The Bulwark, Brecon.

MAGNETITE SEWAGE AND WATER PURIFICATION COMPANY (LIMITED).—Capital 30,000*l.*, in 1*l.* shares. Objects: To acquire the business now carried on by Geo. H. Skelsey, trading as the "Magnetite Sewage and Water Purification Company," at Mostyn in North Wales, and at Manchester, and to manufacture magnetite, celite, and similar commodities.

CARBOY HAMPER COMPANY (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To acquire from Frederick Duckworth, of Radcliffe, Lancs, chemical manufacturer, the business of a carboy-hamper manufacturer carried on by him, and to manufacture, sell, and deal in carboy-hampers, crates, skips, baskets, &c. The first directors are:—F. Duckworth, J. Hampson, and Henry Roston.

ROBY & MITCHELL (LIMITED).—Capital 5,000*l.*, in 5*l.* shares. Objects: To acquire, take over, and carry on the business of varnish, paint, and colour merchants, oil boilers, refiners, and merchants, drysalts, gum-merchants, and produce importers carried on by George Roby and Walter S. Mitchell at Holbeck Moor, Leeds. Registered office, 14 Butts Court, Albion Street, Leeds.

AÉRATOES (LIMITED).—Capital 163,000*l.*, in 1*l.* shares (130,000 preference). Objects: To acquire, work, and turn to account inventions, processes, methods, and patents for or in relation to manufacturing or closing receivers for containing compressed or liquefied gases, to enter into an agreement with E. Stern, and to carry on the business of chemists, analysts, exporters, importers, shippers, manufacturers, merchants, and dealers of and in metals of all kinds and apparatus manufactured in accordance with such patents. Registered office, Broad Street Avenue, E.C.

HOOPER'S DRUG-STORES (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To purchase or otherwise acquire and take over as a going concern the business carried on by William H. Hooper, at 59 High Street and 31 Peckham Rye, Peckham, London, S.E., to enter into an agreement with the said vendor, and to carry on the business of a wholesale, retail, and manufacturing chemist and druggist, patent-medicine vendor, dealer in medicated wines, photographic chemist, &c. The first subscribers (each with one share) are:—Wm. H. Hooper, 59 High Street, Peckham, S.E., chemist; Sidney F. Hooper, 47 High Street, Peckham, S.E., hosier; Thomas H. Rowe, 21 Atherley Road, Waverley Park, S.E., warehouseman; Wm. K. Snell, Joseph Hooper, 31 Peckham Rye, S.E., chemists; Henry Cole, 170 Old Kent Road, S.E., grocer; Seth Harry, Fore Street, Walthamstow, chemist. Registered without Articles of Association. Registered office, 59 High Street, Peckham, London, S.E.



## Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on August 5 at 67 Lower Mount Street, Dublin. Present:—Mr. Downes (Vice-President), in the chair; Messrs. Hodgson, Kelly, Professor Tichborne, Whitla, Evans, Murray, Bernard, and Grindley.

### THE PHARMACEUTICAL SOCIETY v. BOYD.

The VICE-PRESIDENT mentioned that the Society had succeeded in two summonses brought against Mr. W. S. Boyd, proprietor of the Liverpool and Belfast Tea-house and Drug-stores, Belfast—one for unlawfully keeping open shop for the sale of poisons, and the other for selling laudanum without being qualified to do so. The Magistrates inflicted on the defendant two penalties of 5*l.* each, with costs. The defendant traded under a company name with a registered druggist as partner. Mr. Downes then read the judgment delivered by the Chairman of the Magistrates (see *C. & D.*, August 8, 1896, page 248). In the course of a short conversation,

Mr. EVANS asked: Why was Mr. Boyd only fined, and not his partner also?

The VICE-PRESIDENT: His partner is a qualified man.

Mr. HODGSON: I take it that they both committed the breaches of the law.

### THE PRELIMINARY EXAMINATION—NEW REGULATION NOT APPROVED.

A letter from the Privy Council Office intimated that the Lords Justices could not approve of a regulation which the Council passed on October 2 last, in reference to the acceptance of the Preliminary examinations of other bodies. The regulation in question was—

That no examination in lieu of the Preliminary examination of the Society be in future accepted which does not contain all the subjects required for our Preliminary examination. This regulation is not to come into force until after April 1, 1893.

The VICE-PRESIDENT: The only body that was hit by that regulation happened to be the Pharmaceutical Society of Great Britain, whose Preliminary examination is very elementary, and it was considered unfair to those who passed our examination to have others admitted on an inferior examination.

Mr. EVANS: Do the Privy Council give any reasons?

The VICE-PRESIDENT: No. We sent them a correspondence showing that the English Society themselves complain of their own Preliminary examination.

Mr. WHITLA: How does the matter stand now?

The VICE-PRESIDENT: Our regulation on page 113 stands.

Mr. KELLY: The English Society won't receive our Preliminary, whilst we receive theirs.

Mr. EVANS: Will you approach the Privy Council again and ask for their reasons?

The VICE-PRESIDENT: I don't think there would be any use in our approaching them again on the subject, except to ask them to cancel the whole as *ultra vires*.

### THE LADY GROCER CONTRACTOR FOR DRUGS.

A letter was received from the Local Government Board in reply to one from the Council complaining of the giving to a Mrs. Greer of the contract for the supply of medicines to the Granard Union. The letter enclosed other letters which had been addressed by Mrs. Greer, and also by medical men, to the Guardians, and which were to the effect that she procured all the drugs and medicines that she supplied to the workhouse from a "wholesale Dublin house," and that every article was guaranteed to be of the best quality. The Guardians stated that they were satisfied on the subject.

The VICE-PRESIDENT: This lady, who is a grocer, put in a tender for the contract, which was accepted by the Guardians. The matter was brought under our notice as a grievance to our licentiates. We asked the Local Government Board to inquire into the matter, and now we have their reply.

Mr. BERNARD: There is no doubt that unqualified persons in different parts of the country have influence with the Poor-

law Guardians, and act more or less as agents for Dublin wholesale houses.

Mr. MURRAY said that to his knowledge contracts of the kind in question were made with London and Dublin wholesale houses through persons who got a percentage.

Mr. BERNARD: There is the greatest dodging in connection with these medicine-contracts.

Mr. HODGSON said that for years his firm had systematically refused to go in for any of those contracts, they were so unsatisfactory.

Mr. BERNARD: If I had copies of these Poor-law Union contracts throughout Ireland, I would prove that no two of them agree as to prices.

Mr. HODGSON said that in those contracts the pricing was managed according to a system of manoeuvring. For example, calomel, of which very little would be used, was put down at 1*d.* a pound, whilst linseed-meal—of which a great deal would be used—was put down at a very high price. The majority of the wholesale drug-trade declined to have anything to do with those contracts.

Mr. EVANS: Have we any redress?

The VICE-PRESIDENT: We have none.

### COUNCIL CANNOT INTERPOSE.

A rejected candidate at the last examination for the licence petitioned to be allowed the certificate. He stated that he obtained in the aggregate eight marks more than were required to entitle him to pass. He was, however, one mark short of the minimum in botany, and three short of the minimum in theoretical chemistry. He was anxious to be able to conduct business for his father, a registered chemist and druggist, who was nearly 80 years of age and in failing health. His pharmacy marks were thirty-two above the minimum.

Mr. GRINDLEY: According to the Act it rests with the examiners, and we should be stultifying ourselves if we interfered with their decision.

Mr. HODGSON: We should be establishing a dangerous precedent if we did.

The VICE-PRESIDENT: We might refer an exceptional case back to the examiners, but there is a danger of their thinking that we want to dictate to them. They have power to pass a candidate whose general intelligence justifies them in doing so, although he may not attain the prescribed standard in a particular subject. The minimum must be maintained in each sub-division.

Mr. WHITLA: It is a hard case, but I don't think we have any power to interfere.

On the motion of Mr. MURRAY, seconded by Mr. GRINDLEY, a resolution was passed to the effect that the Council declined to interfere with the examiners in the case.

### THE EXAMINATIONS.

The reports of the examiners showed that at the recent examinations 22 candidates entered for the licence, 3 absented themselves altogether, 3 failed to attend after the first day, and of the residue 9 passed; that at the examination for pharmaceutical assistants 2 presented themselves, neither of whom passed; that at the examination for registered druggists held in Dublin 4 presented themselves, of whom 2 passed, 1 was rejected, and 1 absented himself; and that at the same class of examination held in Belfast 3 presented themselves, of whom 2 passed.

On the motion of Mr. EVANS, seconded by Mr. MURRAY, Mr. T. W. Robinson was re-elected examiner in practical pharmacy.

### NEW MEMBERS AND ASSOCIATES.

Mr. Alfred Weller Mann, of Connswater Medical Hall, Belfast, and Mr. Thomas O'Sullivan, of the Mall, Waterford, were elected members of the Society.

Mr. Daniel Taggart, of Bushmills, was elected an associate druggist.

Mr. J. J. Fitzsimons, of Moyvalley, and Mr. Mathew Johnston, Fintona, were nominated for membership.

SMITH: "Old Dr. Pills's son is making ducks and drakes out of the fortune that his father left him, so I hear." JONES: "Well, what else could you expect? The old man was a quack, wasn't he?"



## Legal Reports.

### AN UNREGISTRABLE DENTAL QUALIFICATION.

AT the Cardiff Police Court on Tuesday, before the Stipendiary (Mr. T. W. Lewis), the adjourned case of the British Dental Association v. N. A. Givovic again came on for hearing. Mr. Belcher, who appeared for the prosecution, said that defendant had been summoned under the Dentists Act, 1878, for having used the description "American Artificial Teeth Company" in front of his premises, thereby implying that he was specially qualified to act as a dentist. When the case was before the Court a fortnight ago, Mr. Jackson, who appeared on the other side, set up the defence that the defendant possessed a foreign diploma which entitled him to practise as a dentist, and the case was adjourned in order that he (Mr. Belcher) might inspect the diploma. He had inspected the document, and found that it was a Californian diploma which referred to a degree not recognised by the Council of the British Dental Association. He did not, however, propose to go further into the case, as the defendant had sold his business and left the town, and therefore the objects of the prosecution had been satisfied. The Stipendiary: I suppose you say, "Thank God, we have got rid of the knave." Is that so, Mr. Belcher? Mr. Belcher: Yes; and I do not under the circumstances ask for more than a nominal penalty. Mr. Jackson having admitted that an offence had been committed, the Stipendiary imposed the nominal penalty of 1s.

[It seems to us an abuse of his privileged position for a magistrate to make an observation such as is reported above. We know nothing of the defendant in the case, but the evidence does not reveal any moral iniquity whatever, nor, so far as we can see, even a legal informality. It is surely absurd to tell us that the description "American Artificial Teeth Company" implies "special qualification."—*Ed C & D.*]

### MANUFACTURE OF ARTIFICIAL CAMPHOR — BLACKWELL v. McKENNA.

MR JUSTICE KEKEWICH, in the Chancery Division of the High Court of Justice, on Tuesday last, heard an application for an injunction arising out of the formation of a company to purchase and work a process for making artificial camphor, as to which it was incidentally stated a German house had found the money to carry on the process in that country. Mr. Eastace Smith, who appeared for the plaintiff, said in June, 1895, he agreed with the defendant to promote the sale of the process to a company in England, and that they should equally divide the profits. The Crystal Manufacturing Company (Limited) was accordingly formed, and had allotted to McKenna 7,000 fully-paid-up shares, the agreement for sale being, as a matter of convenience, made with him alone, and the shares allotted to him accordingly. McKenna, telling plaintiff that he had sold 50l. worth of the shares, paid him 25l., and subsequently two sums of 30l. and 5l. in respect of other shares, which plaintiff averred had reached some 250; but being unable to get a settlement of his share, he commenced this action, and now sought to restrain the defendant from parting with, or the company co-defendants from transferring, any of the remaining shares without providing that a moiety should be transferred to the plaintiff. For the defendant, Mr. Bonsey said the agreement had an endorsement on its back that it was subject to any arrangement with Mr. John Edward Kerrison Wood, who was the discoverer of the process, of which plaintiff had no practical knowledge, that Wood should have two-thirds and McKenna one-third of any profit to be derived from its sale. Plaintiff's share, therefore, was at most one-sixth, and that proportion he was willing should be reserved to him. In the result, Mr. Justice Kekewich saying that there were evidently questions to be tried between the parties, as to which a third person might possibly be cited, granted the interim injunction asked for, on the agreement to pay plaintiff one-half the proceeds, and on the application of counsel for the company, who admitted there were over 5,000 of these shares on their register in defendant's name, refused to dismiss them from the restraint.

### LEMONADE-POWDERS.

In the Chancery Division on August 7, Mr. Justice Stirling heard a motion in the action *Clark v. Sharp*, in which the plaintiff, a manufacturer of "lemonade-powder" at Maidstone, sought interim injunction, pending the trial of the action, to restrain the defendant from passing off, or attempting to do so, any powder for the manufacture of lemonade by the use of labels so closely resembling those of the plaintiff as to be calculated to deceive. Mr. Graham Hastings, Q.C., for the plaintiff, said his client began to manufacture this article early last year. This year the defendant, who is a confectioner, had been putting a lemonade-powder upon the market with a label so similar to the plaintiff's that it must have been copied. Mr. Ingle Joyce, for the defendant, denied that his client had copied the label; and as soon as complaint was made of its similarity he at once undertook not to continue the use of the label. On the defendant now undertaking not to continue the use of the label, and not to use any other so resembling the plaintiff's as to be calculated to deceive, his Lordship directed that the motion should stand over until the trial of the action.

### SALE OF FOOD AND DRUGS ACT.

#### ANALYSTS DIFFER.

ON August 6, before Mr. Bros, at the North London Police Court, several cases were brought by the Hackney Vestry against local dealers for alleged adulteration of milk. Mr. Taylor, public analyst for Hackney, gave certificates showing that in each case the milk had been watered; but Mr. C. V. Young, who defended, called Mr. De Hailes, public analyst, of Red Lion Square, to dispute the certificates. In each case Mr. De Hailes's certificate differed materially from that of Mr. Taylor. In cross-examination, he said he adopted a different method of determining the constituents of the milk, and, whilst not saying his was the best method extant, held that it was as good as any other. He also admitted that it was very difficult to arrive at a distinct analysis of milk during the hot weather; but he suggested that the sanitary inspector had kept his samples too long before being submitted to analysis. Mr. Young, for the defence, contended that each of the summonses should fail because of the discrepancy in the analysts' certificates, and the fact that the authorities at Somerset House were unable to give a certificate as to the quality of the third portion of the sample submitted to them, because of its deteriorated condition. Mr. Bros dismissed all the cases (three), being of opinion that Somerset House was the arbitrator in such matters; and as the samples submitted could not be analysed, there was no means of judging between the certificates before him. He declined to grant costs, though Mr. Young said it had cost his clients 3l. 3s. each to bring Mr. De Hailes there, in addition to other expenses.

### TINCTURE OF RHUBARB.

AT Sedbergh Petty Sessions on August 5, John Branskill, grocer, Dent, was charged with selling tincture of rhubarb which the county analyst certified contained only about two-thirds of the proper ingredients. It contained 372 parts of extractive matter, 31.95 parts alcohol, 64.33 parts of water, and was destitute of saffron. Fined 5s., with 1l. 6s. 10d. costs.

### BORACIC ACID IN MILK.

DR. JOHN STEVENSON, President of the Society of Public Analysts, gave important evidence before the Magistrates at Enfield on Monday. A milk-dealer had been summoned by the inspector under the Middlesex County Council for selling milk as an article of food in which was a mixture of boracic acid and water, said to be injurious to health. Mr. E. Bevan, the local analyst, certified that the milk contained 30 gr. of boracic acid per pint, and that it also contained 10 per cent. of added water. Dr. Stevenson said boracic acid and preparations thereof were largely used as preservatives of food. About 0.1 per cent. of boracic acid, or 0.15 of borax, was sufficient to preserve milk for twenty-four hours, and this quantity should not, in his opinion, be exceeded. Further,



he was of opinion that if milk was stored in clean vessels it would keep sweet for twenty-four hours in its natural state. The quantity of boracic acid taken by a child should not exceed 10 gr. per day; a larger quantity would be attended with risk to health. Those substances when used in excess checked digestion, and large quantities were injurious to the heart, and at times caused skin-eruptions. Thirty grains per pint was an excessive quantity, and any person, especially a child, taking such milk in ordinary quantities would be liable to the attendant evils. Ordinarily a child should take about  $1\frac{1}{2}$  pint of milk per day. The defendant denied having put the acid into the milk, and added that he was ignorant of its presence. The Magistrates were of opinion that the offence had been proved; but, as this was the first case of the kind that had come before them, they decided to deal leniently with the defendant, and only imposed a penalty of 1*l.*, with 1*l.* 10*s.* 6*d.* costs.

#### COUNTY COURT CASES.

##### COMMITTAL OF A CHEMIST.

IN the Westminster County Court on August 6, in the case of Walker v. Prague, the defendant being described as a provincial chemist, an order was made for the payment of the debt in a month, subject to committal to Holloway for twelve days.

##### SOAP AND PERFUMERY ON CREDIT.

IN the Westminster County Court on August 6, Messrs. Truefitt, the well-known perfumers, of Bond Street, sought to enforce payment of a judgment debt in respect of fancy soap and perfumery supplied to the order of a Mr. Clark, described as a stockbroker living in luxury at West Kensington. The debtor admitted the debt, but said he was totally unable to pay at present. The Judge, however, ordered payment of the amount due in six weeks, subject to committal to Holloway for twelve days.

##### A COMPANY CHEMIST'S TRANSACTIONS.

AT Leeds Assizes, in the Nisi Prius Court, on Tuesday, before Mr. Justice Bruce, an action was brought by Mr. J. Arthur Jessop, chemist, of Bradford, against Mr. Arthur Cecil Wright, of Birmingham, to recover damages for breach of contract. Mr. Robson, Q.C., and Mr. F. Palmer appeared for the plaintiff, and the defendant was represented by Mr. E. Tindal Atkinson, Q.C. and Mr. Scott Fox.

Mr. Robson said the plaintiff, besides being a chemist, was also interested in the Liebig Medicated Wine Company (Limited), which was formed in March, 1893. He had himself founded the business, and had carried it on prior to the formation of the company. Of 3,000 shares in the company he held 2,700, besides 1,000 debentures, and he had lent 1,000*l.* to the company. His general business consisted of nine chemists' shops, carried on by him and his wife, which in 1895 he had formed into a company. This company was carried on under the name of Goodall, which was his wife's name. Being desirous of having assistance in carrying on the Medicated Wine Company, as he found it required continual travelling, he replied to an advertisement for a partnership in January, 1895. As a result a contract was entered into between the plaintiff and the defendant, but before entering into the contract the defendant employed a Mr. Gibson, an accountant, to examine the books. On February 12, 1895, an interview took place at Bradford between the parties, and the defendant then agreed to pay 2,500*l.* for one-half of the debentures and one-half of the shares. The defendant was to be managing director, to be entitled to draw at the rate of 500*l.* per annum, and if at the end of the first year the defendant should wish to retire, the plaintiff undertook to find a purchaser for the shares and debentures at par. The plaintiff was to make up the assets to 4,000*l.*, without taking into account the debentures and loans, and only putting against these assets the trade credit. He was to show assets amounting to 4,000*l.* that would be available to meet the debentures and share capital of the company. The defendant entered into the contract, and began to travel; but the defendant's brother, who was really the person that was providing the

money, began to put difficulties in the way, and the contract not having been fulfilled, the plaintiff now sought reparation in the shape of damages.

Mr. Atkinson, addressing his Lordship on behalf of the defendant, said that the correspondence showed that after these proposals a dispute arose with regard to the date at which the defendant was liable to pay the sum of 2,500*l.* The proposal showed that a formal agreement was to be drawn up. The agreement was drafted, and was sent to the plaintiff. In it the defendant stated that the amount was not to be paid before March 31, when the accounts were made up. That was repudiated by the plaintiff, who alleged that he was to be paid forthwith, and to that the defendant would not agree. It would be seen that this was not a sale of the Medicated Wine Company's business to the defendant. It was a limited company under the Companies Act. He admitted that there had been a breach of that contract, and the question was as to the damages.

The plaintiff gave evidence in accordance with his counsel's statement. In cross-examination by Mr. Atkinson, the witness said it was correct that the average profits for the last four years amounted to over 1,000*l.* annually. He had plenty of money, but had more than one pair of hands could do.

"The last three years' profits were a little over 3,500*l.*," and "the present turnover is about 6,000*l.*" What did that refer to?—I do not know exactly.

Did you state, in conversation with Mr. Wright and Mr. Gibson, that you were worth 20,000*l.*?—Between 16,000*l.* and 20,000*l.*, I said, so far as I knew.

Did you wish to convey to Mr. Wright that you had made a large amount of money out of the wine company?—Out of the two companies.

It was a very profitable business, this wine business—well worthy of his going in for?—Yes.

At the end of January, 1895, is it a fact that the Medicated Wine Company had an overdraft at the London and Midland Bank to the tune of 86*l.* 2*s.* 7*d.*?—It may have been.

Mr. Atkinson, after pointing out several dates when the account was overdrawn, called the plaintiff's attention to the fact that the drug company's account was overdrawn at March, 1895, to the extent of 3,449*l.* 12*s.* 7*d.*—The plaintiff stated that that had been paid off in March with money which he had received from Leeds.

Mr. Atkinson: Is it true that a cheque of the Liebig Medicated Wine Company (Limited) for 28*l.* was dishonoured two days before you wrote about a very profitable business, and the income of which was over 3,000*l.* annually?—Yes, and I closed the account.

Was there not another cheque, for 33*l.* 1*s.*, also dishonoured?—Witness (perusing the bank-book): I do not find it here.

On February 11 was a bill for 85*l.* dishonoured?—I do not know; I have no recollection of it.

The day before the agreement?—Whose bill was it?

A bill upon which your company was responsible.—Who was it drawn by?

Herbert Kaye.—Herbert Kaye is here to explain it.

Wasn't the acceptance of your company dishonoured?—By a mistake in a telegram.

In March was there a cheque of the Goodall Drug Company for 99*l.* 15*s.* 10*d.* dishonoured?—I don't know.

Are you prepared to deny it?—I can neither deny nor admit.

Had you any County Court judgments against you?—I might have had, but I always paid them.

Mr. Atkinson then questioned the plaintiff as to these County Court judgments against him. All of these, the plaintiff said, had been paid. He further admitted that on September 14, 1895, a bankruptcy notice was served upon him at the instance of the Morecambe Pier Company. He said he had taken 500 shares in that company on the promise that he should be made a director. When he found he was not to be a director he declined to take the shares. He thought he went into court. He was advised to pay, and paid 195*l.* It was his wife, not he, he said, in answer to further questions, who gave a bill of sale on her furniture to a loan company on October 23, 1895; although he had represented himself to be worth from 16,000*l.* to 20,000*l.* he had no furniture. His wife's property was threatened—as to whether it belonged to her or not, so 250*l.* was advanced



upon it. He did not know who got the money. The bill of sale was solely to protect his wife's property. The interest on the loan was 40 per cent.

Mr. Atkinson: Is the story you have been telling us true?—Yes.

Was it not a fraud to put forward your wife as the owner of the wine company in the bill of sale?—I did not do so?

Who gave them the information?—They wrongfully put it down.

Do you swear you did not give them these addresses of your wife?—I do.

Are you telling us the truth?—Yes.

In general conversation you gave this description of your wife by accident?—Yes.

Continuing, the witness said that he had urged that the words describing his wife as the owner of the wine company should be struck out. The description was put in at 110 Cannon Street, London. His wife had been unwisely let in to borrowing at 40 per cent. It was true that he had more than once been summoned for rates; in one case it was for shops for which the company, and not he, should have been rated.

But you were the company, and would ultimately have to pay?—I paid.

Were bailiffs put in first?—I won't swear.

The Judge: Does it escape your memory about the bailiffs?—No answer.

Replying to further questions by Mr. Atkinson, the plaintiff said he was again summoned in the same year for 20*l.*, and in June, 1895, for 11*l.* 19*s.* 1*d.* for gas, when the bailiffs were again put in. In October and November of last year he sold both companies. He had a large holding in the chemical company. He received for the companies 14,000*l.*, including 5,000*l.* in cash, out of which he paid his debts. Book debts amounting to 3,000*l.* were left for him to collect; 2,000*l.* being for the wine company and 1,000*l.* for the drug company.

Re-examined by Mr. Robson: The chemists to whom the wine was sold took long credit, while he had chiefly to pay cash. As the businesses were growing he was occasionally short of ready money. The drug-business was a flourishing and profitable concern, and made 1,800*l.* profit last year.

His Lordship, intervening, said: I think enough has been proved to satisfy me that the plaintiff was not entitled to any damages, and that the defendant was justified in not carrying out his contract.

Mr. Robson urged that his client was well able to fulfil the contract. He had two businesses, which were, according to the evidence, worth 17,000*l.*, and he had a banker who, on one business alone, had an overdraft of 3,000*l.*

His Lordship: The man does not seem to have had sixpence of his own money.

Mr. Robson, continuing, protested that this was a hard case. A more unmerited attack than had been made upon the plaintiff he never knew. There was not a single pecuniary consideration under the contract that the plaintiff could not fulfil. Because the man was occasionally short of small change—

His Lordship: Always short, apparently. (Laughter.) I have the strongest feeling in this case of the way in which your client has exposed himself. It is a very serious thing for him.

Evidence was then given by Mr. Walker, accountant, who had examined the plaintiff's books and prepared a balance-sheet. In cross-examination by Mr. Atkinson, he said that the annual profit amounted not to 1,000*l.*, but to 700*l.* or 800*l.* Arrived at in the ordinary way, the profit from March 31, 1894, to March 31, 1895, would be 470*l.* for that year.

Mr. Atkinson, who did not call any witnesses, submitted that he was entitled to lay bare, as he had done, the fact that the plaintiff was not in a position to meet his financial liabilities under the contract. The plaintiff had to confess that he was not in a position to carry out the first term of the agreement—namely, to procure the very debentures for which the defendant was to pay. The balance-sheet prepared in 1895 showed that in that year the profits went down to 470*l.* for the whole year from 710*l.* in 1894.

His Lordship, in delivering judgment the next day, said he was of opinion that there had been misrepresentations by

the plaintiff as to the value and takings of the business, and, further, that such misrepresentations were false to his (the plaintiff's) knowledge. That disposed of a question of law which would afterwards have arisen as to whether representations made as to the value of the business under valuation, to the knowledge of the vendor, would justify the defendant in breaking an agreement to purchase. His judgment would be in favour of the defendant on all the main issues raised in the action, but with regard to certain expenses incurred by the plaintiff at the request of the defendant, amounting to 29*l.* 13*s.* 6*d.*, for journeys to Birmingham and extra fees to auditors, he gave judgment in favour of the plaintiff for that amount.

Mr. Atkinson applied for the costs of the action to be given to his client, who had succeeded on all the main issues.

His Lordship said that was a matter the Taxing Master would deal with on the terms in which he had given his judgment. His Lordship then gave judgment for the plaintiff for 29*l.* 13*s.* 6*d.*, and ordered the defendant to have the costs on all the other issues except those upon which the plaintiff had succeeded.

## Bankruptcies and Failures.

*Re MEYER, SPAULL & SCHLENGEMAN, 14 St. Mary Axe, E.C., Chemical and Australian Merchants.*

UNDER the failure of this firm applications for orders of discharge were made to Mr. Registrar Linklater, sitting at the London Bankruptcy Court, on August 7. The case of Messrs. Spaul and Schlengeman, the only partners in the firm at the date of the failure, was first heard, and was followed by Mr. Meyer's application, he having been made bankrupt about the same time in March last. The Official Receiver reported that the firm's ranking liabilities amounted to about 6,670*l.*, whilst their assets, although valued at 954*l.*, had not realised anything, and it was very doubtful whether anything would be received in respect of them. The circumstances of their failure have been recently reported. The Official Receiver charged as offences—(a) insufficiency of assets to show 10*s.* in the pound on the unsecured debts; (b) imperfect books; (c) giving two undue preferences to creditors within three months of the failure; and (d) misconduct in using for their own purposes moneys received by them as agents for and on behalf of other persons. The application was also opposed by the Mercantile Bank of London, the National Bank of Australasia (Limited), and other creditors. Schlengeman pointed out that at the time the reported misconduct took place the creditors in question held security to the amount of over 300*l.*

In giving judgment the Registrar said there was a deficiency of nearly 7,000*l.*, as probably little or nothing would be realised out of the estate. The books had been kept in such a manner that the insolvent condition of the firm in August, 1895, was not shown. It was clear, however, that the major portion of the unsecured debts was contracted during the period of insolvency. Shortly before the receiving order was made the bankrupts committed the serious offence of giving undue preferences to two of their creditors. Dealing with the allegation of misconduct, his Honour said the Official Receiver had stopped short of fraud, and if fraud had been found the discharge would have been absolutely refused. It was a case of gross misconduct, and under all the circumstances the discharge of Spaul and Schlengeman would be suspended for four years.

Mr. Meyer's account showed liabilities 2,016*l.*, and assets which had realised 3*s.* 7*d.* The bankrupt attributed his insolvency entirely to the liability for the debts of Meyer, Spaul & Schlengeman. The only offences alleged were insufficiency of assets and imperfect books, and on those grounds his Honour suspended the order of discharge for two years.

*Re HELEN PÜTZ, trading as F. J. Pütz & Co., 16 and 17 Great St. Helen's, E.C., Chemical and General Merchants.*

THE public examination of this bankrupt was held at the London Bankruptcy Court on August 7, before Mr. Regis-



trar Linklater. The accounts show liabilities 1,528*l.*, and assets 571*l.*

In reply to Mr. E. L. Hough, Official Receiver, the bankrupt stated that up to 1892 her husband carried on business as a chemical and general merchant at 21 Mincing Lane. He died in that year, and when witness took out letters of administration accounts were prepared showing a surplus of about 1,200*l.* The greater portion of the estate consisted of the business assets. Under the English law witness was entitled as widow to one-third, and her children were entitled to two-thirds, of the estate. Subsequently she continued the business, relying upon her common sense, as she had no previous experience of the trade. It was an old-established business, and witness wished to preserve it for her son, who was then only 15 years of age. In September, 1895, she opened a branch for the sale of incandescent lamps and fittings, at the suggestion of a firm of German manufacturers, for whom she had formerly acted as agent. Most of her troubles had arisen through that branch, as it was held that the German lamps and fittings were an infringement of the Incandescent Gas Light Company. Witness knew very little of the patent laws, and when she was warned that trouble might arise she simply communicated the fact to the German manufacturers, who replied that they would take all responsibility. An action was ultimately instituted against her by the Incandescent Gas Light Company, whereupon she went to Berlin and consulted a German solicitor, who advised her that, although the letters of her principals appeared to be very promising, they would not carry any liability under the German law. She accordingly entered no defence to the action, and judgment was obtained in default. To her losses and liabilities in connection with the lamp branch of the business witness attributed her failure. The chemical branch had paid its way throughout. This was her only failure.

No questions were asked by creditors, and the examination was ordered to be concluded.

## Deed of Arrangement.

Williams, Ada Jane (wife of Hugh Maurice Williams), trading in respect of her separate estate as Williams & Co., at 1 Market Place, Preston, grocer and chemist. Trustee, Arthur Thraves, 15 Victoria Street, Liverpool, C.A. Dated, July 31; filed, August 4. Liabilities unsecured, 440*l.* 16*s.* 6*d.*; estimated net assets, 275*l.* Assignment upon trust to sell debtor's estate to William Lloyd, of 20 Falkland Road, Egremont, gentleman, for a sum sufficient to pay costs, also a composition of 10*s.* in the pound to creditors, and a sum not exceeding 10*l.* in aid of payment in full the cost of legal proceedings taken by creditors up to July 30, 1896, by three instalments, viz., 5*s.* at one month, 2*s.* 6*d.* at three months, and 2*s.* 6*d.* at six months, from date hereof. The following are scheduled as creditors:—

	£	s.	d.
Ayrton & Saunders, Liverpool .. ..	19	0	0
Bankers' Claims .. ..	12	0	0
Charlton, R., Hall & Co., Liverpool ..	27	0	0
Cooke, B., & Co., Liverpool .. ..	16	0	0
Dumville & Co. (Limited), Liverpool ..	33	0	0
Gilbey, W. & A. (Limited), Liverpool ..	33	0	0
Kay, H. A., London .. ..	16	0	0
Kemp & Son, Horncastle .. ..	36	0	0
Lamb & Watt, Liverpool .. ..	12	0	0
Lloyd, W., Egremont .. ..	40	0	0
Mathews, J., & Co., Liverpool .. ..	14	0	0
Rates and taxes (say) .. ..	10	0	0
Rutter, J., & Co. .. ..	15	0	0
Sumner, R., & Co., Liverpool .. ..	25	0	0
Whalley, T., Liverpool .. ..	35	0	0
Whitbread & Co., Liverpool .. ..	26	0	0
Williams, W., & Co., Liverpool .. ..	16	0	0
Wilson, J. & H. (Limited), Sheffield ..	17	0	0

**A MATTER OF CONSCIENCE.**—First Messenger-boy (ex citedly): "Say, Cully, come into this toy-store and see the nigger dance on a box an' turn summersets widout losin' a step." Second Messenger-boy (solemnly): "I've got a message for a doctor—case of life and death—and can't stop more'n a half hour or so."

## Gazette.

### PARTNERSHIPS DISSOLVED.

Allan, W., and Jones, C. E., Burnley, under the style of the Herbal Beverage Company, herb-beer and cordial manufacturers.

Goodall, J. C., and Bates, T. W. G., Newcastle-upon-Tyne, under the style of Goodall, Bates & Co., oil-refiners and grease-manufacturers.

### THE BANKRUPTCY ACTS, 1883 AND 1890.

#### ADJUDICATIONS.

Claremont, Constantine Cecil, Norwich, surgeon.

Evans, Alfred Edwards, Brynmawr, chemist and druggist.

Hartley, Thomas, Southport, chemist and wine and spirit dealer.

Phethean, James, Bolton, chemist's assistant.

Stanton, Leonard William, late Northampton, now Denaby Main, near Rotherham, chemist and druggist.

Wellock, Christopher, and Wellock, Walter (trading as Wellock Brothers), Keighley, mineral-water manufacturers.

## Marriages.

**ALCOCK—GRANGER.**—On August 12, at King's Norton Church, by the Rev. C. W. Barnard, M.A., vicar, Frank H. Alcock, F.I.C., F.C.S., to Clara J., daughter of Mr. Alfred Granger, Brandwood End, King's Heath, Birmingham.

**JOWETT—FRASER.**—On August 10, at St. Giles Registry Office, H. A. D. Jowett, D.Sc., to Bertha, daughter of the late C. E. Fraser, Esq., of Forest Hill, S.E.

## Deaths.

**MAYO.**—Mr. Thos. H. Mayo, the father of Mr. Caswell H. Mayo, joint-editor of the *American Druggist*, died at Columbus, Miss., on June 19, his 77th birthday. He was a native of Virginia, where the Mayo family are historic. Mr. Thos. H. Mayo went to California at the time of the gold discoveries in 1849, and afterwards went to Mexico. Returning to the United States he took a medical degree and settled in Columbus, where he continued to practise until about four years ago. All the physicians practising in the town followed the funeral. Mr. Mayo's elder son is senior partner in the firm of Mayo & Weaver, jobbing druggists, at Columbus.

**VIRTUE.**—On August 7, at Fawside, Gordon, Berwickshire, John Virtue, chemist, late of Demerara.

**WALKER.**—On August 7, after an illness of three weeks, Mr. Alexander Walker, managing partner of the Irvine Chemical Company. Mr. Walker went to Irvine eighteen years ago as manager of the large works in the alkali-trade, now the property of the United Alkali Company, and a few years ago, upon the acquisition of the business by the Alkali Syndicate, he founded the works of which he was the head.

**WATERS.**—On August 11, at Mossbank House, Wick, N.B., Mr. Alex. Waters, chemist and druggist, at the age of 63. Mr. Waters was a man of much shrewdness and intelligence, and took a warm interest in general and local questions. At one time he was a keen ornithologist and horticulturist, and was a successful competitor at bird and flower shows. He leaves a family of six sons and two daughters.

**A SORELY-AFFLICTED PERSON** is a young woman who is a patient of Dr. A. Alexander (Kentish Town). In childhood she suffered from measles, scarlet fever, and whooping-cough; when 7 years of age she had small-pox; at 16 rheumatic fever, and a second attack before she was 17. She has also had eczema, influenza, bronchitis, and flat feet. She has just recovered from an attack of diphtheria, and it was when she came out of the hospital that she consulted the doctor about some other trouble.



## Trade Notes.

THE Proprietary Articles Trade Association propose to hold a meeting of chemists at Craven Hall, Foubert's Place, Great Marlborough Street, W., on August 26, at 3 P.M.

JEYES' SANITARY COMPOUNDS COMPANY (LIMITED).—The directors announce an interim dividend at the rate of 10 per cent. per annum for the six months ended June 30, 1896.

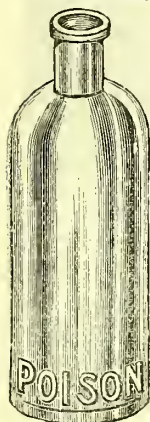
AMONG the more recent signatures to the anti-cutting scheme of the Proprietary Articles Trade Association are:—Timothy White & Co., Portsmouth; W. Thomas, Bayswater; Burgoyne, Burdidge & Co.; Parke's Drug-stores; Lewis & Burrows; Kearley & Tonge; Walton, Hassell & Port; Hovenden & Sons; Day's Southern Drug Company.

WE have received from Messrs. Philip Harris & Co. (Limited), of Birmingham, a copy of their new catalogue of chemicals and scientific apparatus. It is a particularly valuable catalogue of the kind, containing some 300 pages, with illustrations on almost every page, and all well indexed. Apparatus for gas-analysis and for brewers' chemists are among the recent additions.

MR. S. HARVEY, of 5 Denman Street, London Bridge, has sent us a new show-tablet which he has produced for the advertisement of his (Dr. Mackenzie's) arsenical soap. It is of a novel character, the words being in raised enamelled letters on a plush ground, which give a good effect. Mr. Harvey will forward one of these showcards to any chemist who will send his name and address.

MESSRS. THOS. CHRISTY & Co., of 25 Lime Street, E.C., have been enabled to secure a constant supply of the original African kino introduced into medicine some 140 years ago by Dr. Fothergill, and for many years lost to commerce. They are introducing it as "Kano," the old native name, and advertise it as such in our present issue, in which they point out its medicinal superiority compared with the East Indian and other kino-gums of commerce.

Two or three months ago we noted a new poison-bottle which Messrs. Ayrton & Saunders, of Liverpool, were bringing out. We observe that they are now ready to supply these, and their advertisement of them appears this week. The bottle is a round one, of dark-blue glass. The words "Not to be taken" are embossed between the flutings, and the word "Poison" on the smooth surface. It will be seen from the advertisement that the prices for these bottles are very moderate.



MESSRS. OPPENHEIMER, SON & Co. (LIMITED) send us a sample tube of uranium-nitrate palatinoids, each containing  $2\frac{1}{2}$  gr. of the salt. Uranium nitrate has been recently recommended in the treatment of diabetes by Dr. S. West, and, as it is of a repugnant flavour, the palatinoid form seems excellently suited for its administration.

THE SHAFTESBURY INVENTIONS COMPANY (LIMITED).—Under a winding-up order recently made against the Shaftesbury Inventions Company (Limited), meetings of the creditors and shareholders were held last Wednesday at Carey Street, W.C. The company was formed in November, 1894, with a nominal capital of 75,000*l.*, for the purpose of purchasing and acquiring patents generally, and particularly to acquire the letters patent of an invention known as "Anti-diphtherite," a covering for the face to be used by doctors when operating in diphtheria. The attempts to push the patent head-covering were unsuccessful, the doctors declaring that the contrivance would frighten the patients if used. The consideration for the transfer was 20,000*l.* in fully-paid shares, in addition to which only 757 shares were issued. The failure of the company is attributed to lack of capital, but it is further stated that no profit has been made on any business transacted by the company. In the absence

of any nomination for the appointment of a liquidator, the Official Receiver will wind up the company.

MESSRS. J. L. PULVERMACH & Co. (LIMITED), the well-known makers of galvanic bands and electric belts, publish among our advertisements the preliminary announcement of a scheme which ought to secure at least a favourable hearing from chemists. Messrs. Pulvermacher recognise that chemists can often help them by introducing their appliances to customers. But they do not ask chemists to keep a stock; all they want them to do is to place a pamphlet with likely people, and if business results they will credit the chemist whose name is stamped on the inquiry-form with 25 per cent. At present the firm invite suggestions and applications for pamphlets.

WE have received a copy of a neat pamphlet "printed in England," and written by "Tricho," on the subject of brushes. It does not profess to be entirely impartial, but it gives some extremely interesting facts about the manufacture and sale of brushware. It gives tests for the detection of horsehair mixed with bristle, an admixture so difficult to find out that it taxes the skill of experts—unlike fibre, which may be easily distinguished from animal hair by the difference in burning, fibre burning "like a torch," while hair frizzles. The bulk of the book consists of a reprint of a very interesting lecture on the industry of brushmaking, delivered before the Hairdressers' Guild some time ago by Mr. G. Harold Kent, whose firm (G. B. Kent & Sons) have been interested in brushmaking for more than a century.

MESSRS. WILCOX & Co. (Foreign Chemists, Limited), whose premises in Oxford Street have been taken for the Oxford Circus Station of the Central London Railway, have now got settled in their new premises at 83 Mortimer Street, Great Portland Street. They have fitted up a handsome shop with offices at the back, and have a spacious basement, where the stock of the foreign medicines for which they are agents is kept, and where the packing is carried on. The premises in Mortimer Street are principally for wholesale trade, and we understand that Messrs. Wilcox do not intend to do any dispensing-business there, their connection for this having been transferred to the company's other shop in the Haymarket (Jozeau's). Such foreign specialities as they sell by retail are at full prices only.

## Starting a Drug-store.

THE pride of proprietorship beamed from his countenance as he stood on the street and gazed at the big sign which announced to the world the advent of a new drug-store.

"It's the finest location for the business in this part of town," he exclaimed to the junior partner, "and if we work things at all right we ought to make money. I see you have the soda-fountain in."

"Yes. I attended to that the first thing."

"Did you buy the biggest one you could get for the money?"

"Yes. It's one of the most finely equipped to be found in the market."

"And the cigars; we have a variety of them, have we not?"

"Every brand of any consequence can be purchased at our stand. We have one of the largest assortments in the city."

"I'll look it over. You mustn't feel hurt if I give it my personal attention, but we don't want to neglect any detail that may affect the success of this enterprise, and two heads are better than one. We have a supply of fancy toilet articles, have we not?"

"Plenty of them. All the latest styles, too."

"And we have some confectionery?"

"A good line of it."

"And all sorts of little nick-nacks to catch the fancy of the women and make the place look pretty?"

"I am looking after that now."

"Good. As soon as you get it attended to, put an advertisement in the newspaper, and then, when you have time, get in a few little things in the way of drugs and we'll be ready for business."—*Detroit Free Press.*



GOLD MEDALS 1884-1885-1886-1888.

# "SANITAS" DISINFECTANTS

TRADE  
MARK.

"SANITAS" EUCALYPTUS PREPARATIONS.

Kingzett's Sulphur Candles and Sulphugators,

Kingzett's Drain Testers,

Preserved Peroxide of Hydrogen,

Mercuric Bactericide, Eucalyptus Oils.

L. G. B. Corrosive Sublimate Pellets; "Okol" and "Creccide" Fluids and Powders; Chloride of Zinc; Carboic Fluids, Powders, and Soaps; Soluble Carbollated Creosote; Moth Paper; Weed Destroyer, Sheep Dips, &amp;c.

## THE SANITAS CO., LIM.

BETHNAL GREEN, LONDON, E.

## SPRATT'S PATENT



## DOG CAKES.



### "EUREKA" WEED KILLER.

THE GARDENER'S FRIEND.

Saves Time, Labour, and Money. Safe, Effective, and Cheap.

ONLY ADDRESS:

**TOMLINSON & HAYWARD,**  
Mint Street Chemical Works, LINCOLN.

ESTABLISHED 1842.

# Cerebos

## TABLE SALT

FOR  
BRAIN WORKERS,  
FOR WORRIED MEN,  
FOR NERVOUS WOMEN,  
FOR GROWING CHILDREN.

Contains Wheat Phosphates.

CEREBOS LTD., Newcastle-on-Tyne &amp; London.

## G. S. MUMFORD

FARRINGTON ROAD, LONDON, E.C.

No. 1 Finest Pure CRUSHED LINSEED	17/ cwt.	Finest Pure STARCH POWDER	23/ cwt.
No. 2 Pure CRUSHED LINSEED	16/ cwt.	No. 1 Finest Light Pure PRECIPITATED CHALK	27/ cwt.
BEST CLEANED LINSEED	16/ cwt.	No. 2 Pure PRECIPITATED CHALK	23/ cwt.
No. 1 Finest Pure FULLER'S EARTH (Light Colour)	16/ cwt.	"WHITE EARTH" Specially prepared for Toilet purposes	19/ cwt.
No. 2 Pure FULLER'S EARTH	14/ cwt.	Finest Pure Sifted TOILET OATMEAL	22/ cwt.

\* CARRIAGE PAID to Railway Stations within 200 miles of London, or allowance made for distances beyond on a total weight of 112 lbs. and upwards of above articles. Smaller parcels delivered free on rail London at above prices.

## CONDY'S FLUID.

### ELEVEN INJUNCTIONS

With damages and costs, have been obtained against Chemists selling a liquid not manufactured by Condy and Mitchell, Ltd., in execution of orders for "CONDY'S FLUID."



HARMLESS  
AND COLOURLESS, but  
Keeps the Hair in Curl

Write for Showcards and Cash Price List.

STOCKED BY ALL WHOLESALE HOUSES.

F. W. BATES, BROOKS'S BAR, MANCHESTER.

*Vibrona*  
The Ideal Tonic.

Retail price, 4/- per bottle; 45/- per dozen.

Trade Terms:—Less than one dozen, 40/- Net.  
Cases of one dozen, 36/- Net.

*Vibrona*  
For Shipment

United Kingdom:—Carriage paid on three cases.  
For Shipment:—Five cases f.o.b. London.

Sole Proprietors—

Fletcher, Fletcher &amp; Co., Holloway, LONDON.

## Editorial Comments.

### THE PARLIAMENTARY SESSION.

THE Parliamentary Session of 1896 is rapidly approaching its end. It will certainly do no more good or mischief. The anticipations of useful legislation which accompanied its opening have not been fulfilled, and a great many enthusiasts have been disappointed. This may not in all cases be a calamity. The delays and checks which the most philosophically conceived measures meet with in modern



Parliamentary life 'are, no doubt, vexing enough to their ardent authors, but they are really only a salutary provision for the proper ripening of necessary legislation. In these days, when every second man we meet has a pet scheme for the reorganisation of society, it is just as well that every proposal should be scrutinised with, perhaps, rancorous criticism, even when it has advanced so far in public estimation as to have come within the range of possible legislative achievement. Desirable aims are sometimes frustrated by obstruction, but it has the effect of ensuring more careful provision as to the details of measures which stand the fire, and which ultimately secure a place on the Statute-book.

The Royal Assent was given to eighty-nine Bills a few days ago, and there are still others which will have to be thus confirmed. These are mostly private and local Bills, which have never been heard of by the general public. None of them has even a remote association with pharmacy, if we except the Finance Act, which naturally concerns us all.

The Budget of 1896 revealed a surplus of over four million pounds, the largest which had accrued during the past fifty years. The greater part of that magnificent amount was appropriated to naval works and a reduction in the land-tax, and about a million for the relief of agricultural rates absorbed the rest. A few modest protests on behalf of income-tax payers was the only comfort vouchsafed to the trading classes. A new tax of 1*d.* per lb. on cocoa-butter has been imposed, the object being to place British cocoa-manufacturers on an equality with their foreign competitors.

All the Parliamentary work in which chemists are interested has been effected this session in the committee-rooms. In the early part of the year Sir John Lubbock's Shops (Early-closing) Bill seemed to have an exceptional chance of being adopted by the Legislature. Such fortune as attended its early stages may not be anticipated again. It secured an early place on the ballot, and was the first Bill to be read a second time in the House of Commons—was at once referred to the Standing Committee on Trade—and its clauses were agreed to by that Committee with no essential alteration and by large majorities. When, however, it came to be reported to the House of Commons, a vigorous, not to say virulent, opposition was raised against it, principally by the members for the London suburban districts. The business of the House was becoming congested at the same time, and the result was that the Bill has never had a chance of getting a stage further. If it could have come on again the Opposition was at all times strong enough to talk it out. We notice that Sir John Lubbock proposes next session to proceed by way of resolution, his object being apparently to commit the Government to the charge of the question. Sir Charles Dilke, too, has fathered another Shop-hours Bill, which does not seem to be intended seriously.

The Bill to amend the Companies Acts is another measure on which pharmacists look with hope. It was read a second time in the House of Lords on March 19, and was afterwards referred to a Select Committee. The Committee has taken some evidence, but has not completed its inquiry, and suggests its reappointment. Pharmacists have not yet had any opportunity of stating their claim in regard to companies.

The Committee which for two or three years has been considering the amendment of the Sale of Food and Drugs Act, has reported and advised certain modifications in the law. Particulars of the suggestions were given in our last week's issue.

Another Committee has considered the Petroleum Acts,

and, though the evidence up to date is reported, the inquiry is not yet complete, and this Committee will probably be also reappointed.

Lastly, we may mention the introduction of a Bill by the President of the Board of Trade to legalise the use of metric weights and measures.

These items are all that we can select from the record of the Session, and it will be seen that we, as pharmacists, have very little to be thankful for, unless we have sense enough to be grateful for being left alone.

### THE ANTI-ANTI-CUTTERS.

WE are not quite able to understand the purpose of the violent opposition which, as evidenced by our news and correspondence columns, Messrs. Boots (Limited), of Nottingham and elsewhere, are offering to the policy and progress of the Proprietary Articles Trade Association. They may or may not themselves entertain the alarm which they try to arouse in the public mind as to the future accomplishments of the "chemists' ring"; but they can hardly imagine that there is any danger that all the avenues for the exercise of their peculiar form of philanthropy will be closed to them. They will always, we should think, find congenial souls in that tender-conscienced corporation the Carter Medicine Company and others like them, and even if all proprietors of proprietaries should fail them, there will still remain to them—as Mr. Boot not obscurely threatens in the letter which we publish from him to-day—the old device of endowing their customers with the blessing of seven pounds of Epsom salts for sixpence. We do not ourselves think it will be possible to prevent Messrs. Boots from cutting a great many things—not, at all events, till that wonderful scheme which the Birmingham chemists planned out nearly a year ago gets into operation. Other noted cutters, we believe, accept new terms for proprietary articles as they come along with equanimity, if not with gratitude. Why should Messrs. Boots make Scott's pills the Hougoumont of the battle? We do not know how the proprietors of these pills regard the attack; but certainly if anybody has cause to congratulate themselves it is they. By some skilful advertising in Nottingham, Sheffield, and other towns where Messrs. Boots are so generously booming them, they could easily, just now, establish an advanced reputation for their medicine which its merits ought to maintain. They could certainly make Scott's pills the best-known liver-pills in the district. The ground has been ploughed for them. Many an experienced advertiser would pay Messrs. Boots handsomely for such an opening.

We sometimes think that chemists, and even such enlightened persons as Messrs. Boots, are a little disposed to underrate the public intelligence. Surely the most careless reader of Messrs. Boots' advertisements will be inclined to the reflection that "He doth protest too much." When a business-firm intimates in a costly manner that it prefers a halfpenny profit to twopence, there is an irresistible tendency on the part of the reader to a spasmodic contraction of one eyelid. Such tirades need not affect the sale of the article attacked one bit, unless it be beneficially, if properly taken advantage of. And Mr. Jesse Boot is a worse business-man than we take him for if he wastes much more of the 200,000 capital of his company in battering at this Association, if he finds its members stand firm.

### BRITISH GUIANA FOREST-PRODUCE.

It has often been a matter of some surprise that tonca-beans and medicinal balsams, which are such valuable



export-products from Venezuela and from Pará in Brazil, should not be among the exports of our own colony of British Guiana, where they grow as plentifully as in any portion of the primeval forest that covers the territory between the Amazon and the Atlantic. A paper on the gold and forest industries of the colony recently published by Mr. T. S. Hargreaves, the Secretary of the Institute of Mines and Forests of British Guiana, accounts to some extent for the non-existence of this industry in Guiana. Formerly, it seems, when beans, gums, "walking-sticks," and other forest-produce were beginning to make something of a show as a colonial industry, the authorities decreed that collectors must take out a yearly \$12 licence. The object, it seems, was not so much to create a revenue as to prevent the forests from being despoiled as the rubber-forests along the Amazon are now, and as the cinchona-forests have been in the past. As a matter of fact, however, the compulsory licence seems to have put an entire stop to the collection of the articles mentioned. Mr. Hargreaves strongly disapproves of it and says: "It would take many thousands of collectors to do harm to the forest possessed by this colony, and it seems as absurd to try to guard the 'bush' like a nobleman's park as it would be to regard the Atlantic as a private fish-pond. The Government derive absolutely no benefit from these licences because nobody takes them, and the only purpose they serve is to prevent the beginnings of what in time might be remunerative industries. Rubber, Tonca beans, copaiba, gums, and drugs form an enormous trade at Pará in Brazil, and the districts from which these exports come are continuous with the Guiana forests." Another Guiana trade—that in orchids—has also been extinguished by the \$100 licence imposed on collectors. This industry formerly attracted men who brought money into the colony and gave employment to people to take them up in the far interior. The orchid-collectors were valuable to the colony for another reason. "Their researches of necessity led them into the least frequented parts of the colony, and as they often were men of some scientific attainments, they gathered valuable information with respect to the interior." With Mr. Chamberlain at the Colonial Office there ought to be some hope of the repeal of the orchid-tax.

#### DOCTORS AND DRUGGISTS.

The *National Observer* of last Saturday has a lengthy article on the controversy in the *Standard* founded on the criticisms which Mr. Martindale made in his Liverpool address on the declining attention which prescribers pay to pharmacology. The *National Observer* informs its readers that pharmaceutical chemists find a grievance in the fact that they are expected to detect and correct errors in physicians' prescriptions, that a certain responsibility is thrown upon them in this respect, and that, nevertheless, they can be punished for themselves prescribing. "It would seem," says our contemporary, "that the druggist has some real cause for resentment." We fail to see that he has any on the *N. O.*'s assumptions, and we do not think he feels any on the grounds set forth. No pharmacist objects to the responsibility cast upon him in respect of prescriptions; what he wants is more scope for that responsibility. Nor would anyone with a trace of logic in him put forward that responsibility as a claim for the right of prescribing. After discussing round about the subject through nearly half a yard of column space, the *Observer* concludes that it is a pity that the proverbial disagreement of doctors should be supplemented by any disagreement of doctors and druggists. As to the disagreement, we (that is, the *N. O.*) "hesitate, and, indeed, refuse, to pronounce any opinion beyond this—that Mr. Martindale is not a person who would

write without full consideration and reason." The *National Observer's* modesty is evidently abundantly justified by its superficial acquaintance with the facts.

#### PROPRIETARY MEDICINES IN IRELAND.

Mr. J. C. McWalter, of Dublin, directs our attention to the circumstance that nearly all the English patent medicines sold in Ireland are stamped, though they need not be, if they are consigned to an agent in that country, no actual sale being effected in Great Britain. Guy's Tonic, Mr. McWalter mentions as the only exception, though some others, we believe, are sold unstamped for dispensing-purposes, as here. Mr. McWalter states, too, that some of the American medicines (he names Scott's Emulsion and Warner's Cure) are sold in Ireland unstamped, but at the same wholesale prices as are charged for them here stamped. Smart medicine-men would certainly be wise to avoid the stamp on their medicines when sold in Ireland, and to make the fact known, especially in view of the unreasonable prejudice which many Irish people seem to entertain against paying more than their fair share of the Imperial taxation.

#### THE X-RAY PILL.

An American druggist has made a Röntgen pill, so it is said. It is in the form of a minute glass bulb, constituting an "electrodeless" vacuum tube, which, in a field of alternating electrostatic stress will, it is claimed, emit  $x$ -radiation. This radiant pill is photographed in the course of its passage through the intestinal canal, but how report sayeth not. A more practicable method has been devised by Dr. Kronberg, based upon the old-fashioned idea of giving quicksilver as a purgative. Dr. Kronberg administers a certain quantity of metallic mercury, and observes its position in the organs by means of cryptoscopy. He has been able to fill practically the whole intestine of small animals with mercury; in larger ones and in the human cadaver he can follow the course of the metal through the gut. In actual practice he considers that 100 to 200 grains of mercury should be given. As a still simpler alternative he speaks of substituting for the mercury a dose of "salts." Metallic salts cut off the  $x$  light, although, of course, less perfectly than do metals.

#### LAVOISIER'S FUNERAL CEREMONY.

It was on August 12, 1796, just a hundred years ago, since a remarkable ceremony was celebrated at the Lycée des Arts, Paris, in memory of Lavoisier. A writer of the period describes the scene as follows:—"To the immortal Lavoisier is the inscription above the entrance-door of the Lycée, and the large hall, capable of containing 3,000 persons, is thronged with men in mourning and women in white dresses and chaplets of roses. The dim light of funeral-lamps shows the sable hangings relieved with ermine, the flowers and cypress branches, and the scutcheons on the pillars inscribed with the names of Lavoisier's discoveries. At the end of the hall is an immense curtain. Mulot speaks of respect due to the dead; Fourcroy, now the leader of French chemistry, pronounces an elogy of Lavoisier. The gossips shake their heads and ask why this ardent revolutionist did not save his martyred colleague from the guillotine, and hint at professional jealousy and mean ambition, or, at least, a cowardly 'care of Number One.' But the whispering is hushed as the curtain is partially opened and a huge catafalque is shown to view, surmounted by a statue of Liberty and surrounded by a choir of a hundred voices. Lais and Cheuard, the most famous singers of the day, lead the grand cantata which swells through the hall, and as the last verse dies away the bust of Lavoisier, crowned with immortelles, is presented to the view of the vast audience." The cantata was written by Desaudray. The Lycée des Arts was the last scientific body to which Lavoisier belonged. It consisted of fifteen members of the Academy of Sciences



and an equal number of ex-members of the other learned societies which had been abolished during the Reign of Terror. The members of the Lycée publicly sent expressions of sympathy to Lavoisier during his captivity, which at the time was considered an act of much temerity.

#### A SMALL BOX OF SMALL-POX.

Printing was a great invention, but it does not invariably convey the writer's intention. We imagine the gentleman who contributed to the *Indian Lancet* a note on Messrs. Thomas Christy & Co.'s compressed tablets of theine did not exactly mean to recommend them for native use as a convenient remedy for fatigue and slight ailments, "especially as the small-pox is easily carried in the girdle." But it is what the printer makes him say.

#### "SYMPATHETIC BRAIN-FOOD."

The mantle of the erstwhile apothecary's apprentice, John Keats, has fallen in the neighbourhood of Edmonton, where the young poet wielded the pestle; and we imagine that the mantle cannot have fallen at a great distance from "Charles T. Brooks, of Brussels, consulting chemist," who makes "the nervine tonic, phosphated  $H_3PO_2$ , &c., and describes it in language much too deep for us. Here is a section of the handbill, that other chemists may judge how entirely original Mr. Brooks's diction is, how poetic, aphoristic, and what not:—

Preventative of  
Wear, Worry, Waste,  
especially Lungs.

'TONES UP.'

ENHANCIVE.

LONGEVITY.

Reaches that which  
Reaches all.  
HALCYONIC.

'Tis Being, as Becoming well, in the  
all embracing generalisation.'—as has  
appositely enough.

'NO PHOSPHORUS, NO THOUGHT.  
(Constructive and Reciprocation.)

It means, if it is not, Health, with its  
corollaries Cheerfulness, Intellect, intro-  
pidly Nerve, Nervosity identified, of Mind,  
Morals, Manners, etc., obviously educa-  
tive.—

On the strength of Mr. Brooks signing himself "paraphrastically yours," we venture to ask "on à priori principle—ne plus ultra—behind all, one and all, convinces O indifferentism, past question," as he so tenderly puts it, whether his handbill is "copyright," as one has the "altruistic consciousness" after reading it of the need of a "draught recuperative," which the "phosphated"  $H_3PO_2$  seems to be.

### The Chemist Sketched by the Journalist.

IT has pleased a writer on the *Daily Mail* to be gently sarcastic at the expense of chemists. His facts are rather Fleetstreety, but they are told pleasantly enough. If variety is the spice of life, he says, the days of a chemist in a big West-end thoroughfare may be said to be well seasoned. In fact, for variety and excitement the chemist runs the journalist hard. He is often at it for fifteen hours at a stretch, in which case he has fifteen hours of comedy, tragedy, and farce; and the diverse characters of the people who come into his shop from the time the blinds are raised to the time they are lowered would form an interesting study in human nature.

In one of his books Mr. George Gissing has speculated upon the peculiar character of grocers' customers. He should have spent his hour at a chemist's. The people who enter a grocer's do so ostensibly for the purpose of buying groceries. They do not expect to invest in a billiard-table, an umbrella, or a fox-terrier. But the man or woman whom you see making a bee-line for a chemist's may be intent on purchasing a mouse-trap, a manicure set, a sheet of music, or a photographic camera.

A chemist is called a chemist on the "lucus a non lucendo" principle—*i.e.*, because he almost invariably is not a chemist. Some years ago an Act was passed to compel so-called chemists to call themselves "chymists" or "drug-gists"; but this enactment does not appear to be observed with puritanical rigidity. If a chemist is not a chemist, that is about the only thing he is not. I should not like to enumerate all the things he is, but I may mention that he is

sometimes a grocer, a linendraper, a tallow-chandler, a novelty-keeper, a soap-merchant, a perfumer, a sponge-dealer, and a tobacconist. His trade has its rises and depressions, and it changes colour with the facility of a chameleon. Of late a big business has been done in the supply of photographic materials. "For one ounce of drugs," said a druggist to me lately, "we sell a dozen dry plates; and for every prescription we made up we dispense at least one camera."

But that was months ago, and now the retail drug-trade is looking seriously in the direction of bicycles. Several druggists in the neighbourhood of Sloane Street have kept cycling appliances for a long time past, but it is only within the past two or three months that cycling agencies were established and cycles sold. It is certainly very convenient to purchase the machines and cure for the ills they bring about at the same establishment.

Here is the kind of bill chemists must frequently send out:—

	£	s.	d.
1 bicycle .. .. .	20	0	0
Arnica .. .. .	0	1	0
Liniment .. .. .	0	2	6
Splints .. .. .	0	2	0
Bandages .. .. .	0	1	6

"When the bicycle boom is played out," observed a friendly chemist near the Haymarket, "we may take up—"

"Cricket bats?" I suggested.

"Oh, we have long sold cricket bats, and balls, and tennis racquets. I was thinking of auto-cars. What ruined the drug-trade pure and simple was the practice of many physicians in supplying their own drugs to the patient, or in recommending him to their own druggist, which is the same thing in the end. Very few prescriptions are nowadays filled. People go in more for patent medicines—I beg pardon, sir."

A wild-eyed looking man had entered the shop.

"I'm bad again!" he muttered, in a fierce husky whisper. "Quick! quick, man—the usual pick-me-up!"

The chemist went behind the screen and mixed him up a dose of something or other—ammonia probably—and passed it across the counter to the customer, who staggered towards it and drained it greedily. While he was sitting down in a chair mopping his forehead, which was covered with a profuse perspiration, an elderly woman came in and asked to be shown some cut-glass bottles. In a moment cut-glass bottles of every conceivable size and shape and quality appeared on the counter. Where they all came from was a mystery.

Cupboards and recesses—labelled with the names of various chemicals—were opened, and vomited forth cut-glass bottles. The man who thought he "had 'em," after watching the proceedings for a moment with evident distress, got up and made a bolt for the door. It was wonderful, too, what a lot the chemist knew about cut-glass bottles. He dilated for some time on their varying merits, only interrupting himself to run to the other end of the shop and sell a bald-headed man a bottle of hair-restorer, warranted to produce luxuriant, ambrosial locks on a billiard ball, a guarantee with each bottle, and written testimonials from Bismarck, George R. Sims, and Mme. Sarah Grand included. Then, the sale of a decanter finished, he disposed of a kodak to a fourteen-year-old boy, and a package of perfume lozenges to a miss owning perhaps to three summers more.

After this spell of inaction he began to be really busy. A pedestrian who had been run over by a cab in Coventry Street was brought in, pending the arrival of the hospital ambulance; and on the heels of this came two clubmen bearing a drunken comrade, who needed less a stimulant than a soporific. A little girl, bawling with the toothache, and accompanied by her infant brother, demanded instant relief, and a fat man came in to purchase a bottle of anti-fat.

Throughout it all the "chemist" preserved the most astonishing imperturbability, only losing his temper when a commissioner entered on a most extraordinary errand. He held a slip of paper in his hand, which he passed on to the chemist, saying he would wait for it to be "filled." So the chemist left sponges and kodaks, his bicycle-lamps and Jaeger underwear, and, sighing sorrowfully, went to fill the prescription.



## Anti-Diphtheritic Serum and its Preparation.

THE following is a slightly-abbreviated copy of a paper read in the Section of Pathology of the British Medical Association, at the Carlisle meeting, by T. J. Bokenham, M.R.C.S., L.R.C.P., late Research Scholar, British Medical Association. Mr. Bokenham said: During the past two years I have given a great part of my time to the preparation of anti-diphtheritic serum, and to studying the most suitable means for securing its uniform activity. During that time I have received numerous letters from practitioners asking for details as to the method of preparation, how uniform potency is secured, how the tests are carried out, and how the serum should be used in practice.

These showed that something was needed in addition to the descriptions which had appeared from time to time, and I thought the present meeting afforded an excellent opportunity for giving as briefly as possible a practical demonstration of the whole of the processes employed in preparing anti-diphtheritic serum, commencing from the selection of the diphtheria bacillus destined to produce the toxin needed for immunisation, and finishing with a description of the technique of the method by which the serum is put into bottles for use.

### THE DIPHTHERIA BACILLUS TO BE SELECTED.

Roux and Behring found that the best method of preparing a strong toxin was to cultivate the bacillus in a free current of oxygen, and Roux finally employed, and employs still, very wide, flat flasks through which a current of air can be continuously drawn by means of a suction-pump. These flasks are capable of holding a large quantity of bouillon in a layer of small depth. Roux inoculates these flasks and allows the bacilli to grow at a temperature of  $37^{\circ}$  C. for three weeks or a month, possibly longer, with a constant current of air passing over the surface. The method of Roux has been widely adopted, and is still employed in most laboratories. In the course of last year, however, I paid a visit to the Institut Sero-Therapique at Brussels, and studied the methods employed by my friend, Dr. Funck, the Director of that Institute. His results convinced me that it was by no means necessary to employ the complicated method of aëration devised by Roux, and that by using a very virulent bacillus a toxin could be obtained quite strong enough for ordinary purposes—indeed, many times stronger than the Behring "normal toxin." Since that time I have therefore abandoned the method of Roux and adopted one similar to that which I saw in action at Brussels.

In order to obtain an active toxin it is desirable that the bacillary growth should take place chiefly in the form of a dense white pellicle on the surface of the bouillon. The bacilli, as they multiply, are then brought into contact with a free supply of oxygen, and form their toxic products under the best conditions. It is also most important to keep the flask undisturbed from the moment that the pellicle has commenced to form, in order to avoid breaking up the film of bacilli. After about a fortnight or three weeks of incubation at  $37^{\circ}$  C. the culture may be filtered through a sterile porcelain filter, and if the process has been carried out with proper care and a sufficiently virulent bacillus employed, the toxin yielded is of such a strength that a dose of from 1 to 5 centigrammes is fatal (within forty-eight hours) to small guinea-pigs. It is the experience both of Dr. Funck and myself that unless a good firm pellicle is formed the resulting toxin is seldom satisfactory in power.

Before using such a toxin for immunising horses, one should first determine its activity. This is ascertained by tests carried out on small guinea-pigs. We have not been satisfied with any toxin for immunising purposes, unless the lethal dose is at the most 5 centigrammes, such a dose producing death in a 300-gramme guinea-pig within about forty-eight hours. Such a toxin I have employed constantly for nearly twelve months, and it will be observed that it is a good deal more powerful than the toxin adopted by Behring as a standard.

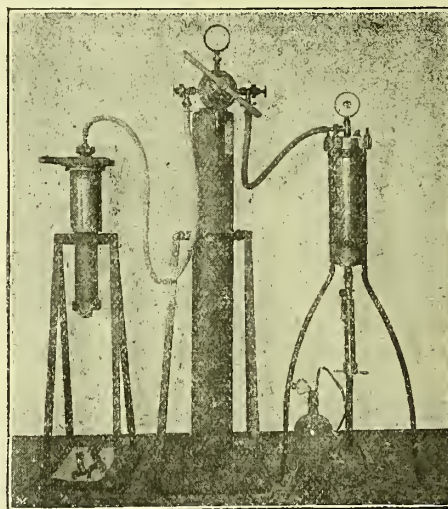
In using such a powerful poison the selection of the breed of horses to be subjected to the immunising-process is of

great importance. That was brought to my notice by a perusal of the admirable results obtained in Italy last year. Some samples of antitoxin which I obtained from Italy were far more active than any obtainable elsewhere. I sought for some explanation of it, and I believe was successful in finding one. In Italy the animals used in preparing serum were, I understand, thoroughbred horses obtained from racing-stables. Such animals seemed to stand the injection of toxin extremely well; they showed very slight reaction either local or general. The process of immunisation was extremely rapid, and the condition of immunity when once established could be maintained with a minimum of trouble. The risk of losing animals as the result of an overdose of poison seemed also to have been reduced to a minimum.

Since making that discovery, I have always endeavoured to select horses which are as well bred as possible, and have gradually succeeded in weeding out from the stables several of the old horses which were first used, and replacing them by thoroughbreds. It is quite a mistake to suppose, as has been frequently stated by writers in the medical journals, that any old horse is good enough for the production of antitoxin. With old horses the process of immunisation is unnecessarily long, and the risk of losing them during that process is enormous.

### THE PROCESS OF IMMUNISATION.

For the first few injections it is necessary to use extremely small and carefully-measured doses of toxin. Roux recommended that the toxin used for the first few injections should be mixed with some mitigating substance, such as



Apparatus used for filtering serum, showing two forms of pressure-filter, cylinder of  $\text{CO}_2$ , regulating valve, and receiver for filtered serum.

iodine trichloride or Gram's fluid. Such a mixture may be necessary in low-bred animals, but it is not so necessary in the case of thoroughbreds. I have found that a thoroughbred horse can almost invariably resist, without undue disturbance, a dose of 25 c.c. of a toxin which is fatal to guinea-pigs in the dose of 4 or 5 centigrammes.

The process of immunisation, as is well known, consists in the continuous administration of graduated doses of toxin, until the animal treated shows neither serious, local, nor general disturbance as the result of the injections. The initial injections, being small in bulk, may be conveniently made under the skin of the shoulder, but when larger doses are required, it is found more convenient to give the toxin by intravenous injection, and I have here a syringe which I find very convenient for the purpose. It consists of the ordinary serum syringe, to which I have added a three-way stopcock. To the main nozzle is attached an injection-needle by means of a rubber connection; to the side branch is attached another rubber tube, which is passed through a cotton-wool plug into a bottle containing toxin. By this arrangement any amount of toxin may be injected with a minimum of trouble and inconvenience both to operator and the animal. I have found it extremely useful in practice.

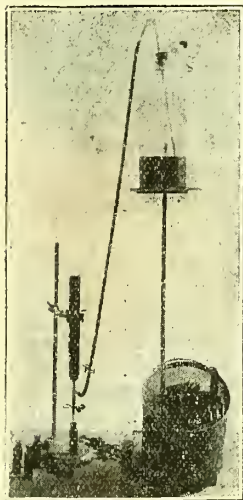


At various stages of the immunisation it is desirable to test the antitoxic power possessed by the serum. For this purpose a little blood can be obtained from the jugular vein by means of a small aspirating syringe. The protective power of the serum obtained from this blood can be readily ascertained by test-experiments on guinea-pigs. After three or four months, if the immunisation-process has been carried on carefully and steadily, the serum should possess an antitoxic power of at least 500 to 700 units per 10 c.c. By the employment of such powerful toxins as those which I have already described, it is no longer necessary to wait from six to twelve months before being able to obtain a serum of sufficient strength for clinical use.

#### METHOD OF BLEEDING THE ANIMALS.

There are two methods by which the blood can be obtained in sufficient quantities for practical use. The first is that generally employed, and consists in the insertion of a large cannula into the jugular vein, which has been previously distended with blood by means of a cord passed round the base of the neck and pulled tight. To the end of the cannula is attached an indiarubber tube, which is placed in communication with the bottle destined to receive the blood. In this manner the blood can be obtained in

an aseptic condition, provided the instruments and collecting-flasks be sterilised previous to use. In some cases, however, when the animal has only a small or not readily accessible jugular vein, it is somewhat difficult to insert the cannula, and the process occasionally also becomes tedious from coagulation of the blood taking place somewhere in the lumen of the tube. Another and somewhat more convenient method is one which I have adopted. No special care is necessary to secure complete asepsis, and the only instrument required is an ordinary sharp fleam, such as is employed by veterinary surgeons. With this instrument I make an incision in the course of the jugular vein and collect the stream of blood, which issues with some force from the wound, in flasks capable of holding about 1½ litre. These flasks are of a form commonly known as filter flasks. When filled they are transferred to an



Apparatus used in decanting and measuring serum.

ice-safe or cool chamber, where they are allowed to remain sheltered from light from twenty-four to thirty-six hours in order to allow complete coagulation to take place. About 8 litres of horses' blood will, as a rule, yield at least 3½ litres of clear serum.

To ascertain the antitoxic value of the serum a series of guinea-pigs of fairly uniform weight is taken. One of these is used as a control-animal, and receives a dose of diphtheria poison corresponding to the lethal amount. The others receive mixtures of various proportions of the serum which is to be tested with ten times the lethal dose of diphtheria toxin. I have a series of slides which I will throw on the screen, and which illustrate in tabular form, better than any words of my own could do, the details of the test above alluded to.

#### LANTERN DEMONSTRATION CHARTS.

It will be observed that they are taken from my notebook over a period of about eighteen months, and are typical of many dozens of similar investigations. It will also be observed that the doses administered are not uniform throughout. During the earlier periods a different standard of immunity-value was adopted, and a serum was issued possessing such a strength that 1 gramme would surely protect 50,000 grammes of guinea-gig against a lethal dose of diphtheria-toxin. In the later records, which correspond roughly to the period during which the Behring standard was adopted, the serum was tested in regard to its power of protecting small guinea-pigs against ten times the lethal

dose of toxin. Thus, a bottle which contained 10 c.c. and was said to have an immunity-value of 600 units, contained a serum of which  $\frac{1}{300}$  gramme completely protected the animal against ten times the lethal dose of toxin.

The serum having been tested and found active it has to be sterilised before it can be used with safety. For that purpose I have had a large-pressure filter constructed, somewhat after the model originally designed by d'Arsonval, through which the serum can be forced by means of pressure supplied by liquefied carbonic-acid gas, the pressure required being regulated by means of one of the very convenient pressure-valves made for me by Messrs. Uhlmann & Keutgen, of Lime Street, London, E.C. I have the whole apparatus here, already charged with serum requiring filtration, and I propose to demonstrate the process practically to you.

#### DEMONSTRATION.

It will be seen that the conditions under which the filtration takes place are such as to almost absolutely preclude the possibility of the serum, which has been sterilised by passage through porcelain-filter tubes, from becoming again contaminated by the introduction of chance microbes from the air. In order to carry out the rest of the process, and to charge each bottle with the required quantity of serum, I employ burettes of the model which I here show. By their use the measurements can be carried out with the greatest possible facility and with practically no risk of contamination.

I may mention, finally, that no single bottle of serum is allowed to leave my laboratories for clinical use until it has been securely corked and sealed under my direct supervision.

### From the Venezuelan Frontier.

*An American Pharmacist's Impressions of Venezuela and the No-Man's Land on the Guiana border. He doesn't like it. Comforts are few: Snakes, Insects, and Scorpions many. It rains every day in the Dry, and incessantly in the Wet, Season. Though often in Danger, he returns safe to Civilisation and Pharmacy, but a Fish bites a circular piece out of his Thumb.*

DR. HENRY H. RUSBY, of the New York College of Pharmacy, has just returned to New York from a four months' trip to the upper reaches of the Orinoco river and to the Imataca mountains, which are in the territory concerning which Britain and Venezuela are now at loggerheads. According to Dr. Rusby, Venezuela is not, on the whole, a very delightful region for a European to inhabit, whatever the natural riches of the soil may be. Dr. Rusby is quite worn out with the fatigue of his trip, which was undertaken in the interest of the Orinoco Mining and Colonisation Company of the United States, who have got hold of a land-claim in those parts and are about to "open up" the country, part of their scheme being the establishment on the Imataca mountains of a "delightful winter-resort for Americans." In a communication made by the adventurous doctor to the *Pharmaceutical Era* of New York, he states that in the lowlands of the Orinoco it is scarcely possible to get a single night's sleep on account of the insects. He is enthusiastic over the commercial future of the wilderness he visited, but he does not recommend the delta of the Orinoco as a health-resort. The annual rise and fall of the river at Bolivar is 90 feet. During the rainy season the entire delta is flooded, and the native Indians abandon their thatched huts and take temporary refuge in the hills. The little party of which he was one was obliged at the beginning to sleep without shelter from the rain, and the pegs of their cots would gradually sink down into the black alluvium. One member of the party was drowned in the swift current of the great river, and another fell ill of a disease which strongly resembled yellow fever. Dr. Rusby himself was bitten by a fish (which laid him up for a week), stung by wasps, and generally pursued by jaguars, scorpions, alligators, and



snakes. The snakes were the worst and the most numerous. When the adventurers camped out at night in the forests, serpents frequently climbed the trees and made their way along the hammock-ropes into the beds of the sleepers. On one occasion the river overflowed its banks, and the Savanna was flooded. The next morning, as the explorers proceeded through the rank grass, they could see hundreds of snakes of various sorts and sizes making off in every direction before them. More than once a member of the party mistook a snake for a stick; falling into wasps' nests and taking hold of scorpions by inadvertence were quite common incidents. The doctor secured a specimen of a rare fish (which grew like a dog when landed), but in loosening the hook out of its mouth he accidentally withdrew his foot, under which he had held the creature. The fish, with a hop, skip, and jump, was back in the river, carrying off, as a memento, a piece of the Rusbyan thumb. Jaguars used to sport by night through the explorers' huts and no one dared shoot for fear of hitting his comrades.

The expedition consisted of twelve Americans, Dr. A. C. Rogers being in charge. Dr. Rusby was the botanist, with Mr. R. W. Squires as his assistant. The other gentlemen were mostly prospectors and engineers, but a harmless necessary journalist was one of the band. Their steam launch, specially built for Orinoco navigation, got wrecked, so there was nothing for it but to ascend the Orinoco in two rowing-boats and an Indian canoe. A launch belonging to an American company was secured later on, and nearly brought the party into war with Venezuela, because it did not stop just outside Bolivar, where all vessels are supposed to give an account of themselves. Accordingly the launch was fired upon with ball cartridge by a Venezuelan "fort." The Venezuelans, however, are no Tells. Their shooting pleased the shootists and did not hurt the craft, which proceeded serenely and was soon out of range. But when it reached the city of Bolivar the crew found the Venezuelan army, with loaded six-pounders, drawn up to do them battle. The commander of the "fort" had telegraphed to headquarters that a British battle-ship had forced the river and was making for the city.

From Bolivar the expedition sailed back down the Orinoco and spent eighteen days exploring the delta. It was in the dry season, and rain only fell at the average of three-quarters of an inch daily. The party broke up into groups and got along the swamps by tying boards to their feet, like snow-shoes, pushing the boats along in front. A wearisome tramp across country, in the course of which they lost one of their number by drowning, brought the explorers to the Imataca mountains. The trip was rich in botanical results, and the most important mineral discovery made was that of the existence of iron in enormous quantities so close to the bank of the great river that there will be practically no cost for transportation from the mine to the ship. So rich are these deposits of iron that Dr. Rusby predicts that it will not be long before they will rule the iron-market of the world. Shiploads of the ore are already on their way to Philadelphia, for the use of the Pennsylvania iron and steel workers. Almost the entire concession bears an unusually rich growth of balata trees of two species. Many specimens of these trees were brought home, together with samples of the gum derived from them. The asphalt deposits in the island of Pedemates, which is also a part of the grant, have long been known to be of value.

When asked whether he had discovered anything bearing on the boundary-dispute between Britain and Venezuela, Dr. Rusby replied that, as most of his time had been spent in the woods, he had had little opportunity to investigate the subject, but that he had noticed one fact of considerable interest. Part of the way around the top of a mountain near the Orinoco stretches an avenue of bamboo planted in double rows, after the Dutch colonial fashion. There can be little doubt that this avenue was made by some of the old Dutch Guiana planters.

Dr. Rusby has brought back to New York over 17,000 specimens of the flora of the Orinoco region, representing, it is thought, over 600 species. The doctor expects to spend the summer of 1897 in Europe for the purpose of classifying the plants he has collected. The company's territory along the lower Orinoco is a richly-timbered region, peculiar among tropical vegetation because it contains an unusually large variety of soft woods suitable for building-purposes.

## Personalities.

THE will of the late Mr. Wm. Fallon Young, chemist and druggist, Kilmarnock, has been proved in Scotland, the personalty amounting to 1,063*l*.

MR. CHARLES A. IND, formerly with Messrs. Wootton & Son, chemists and druggists, Margate, has passed the first conjoint examination of the Royal College of Physicians and Surgeons.

MR. FRANCIS J. PEARSON, formerly assistant to Mr. Walter Wright, chemist and druggist, Chelmsford, has obtained the licentiate-ship of the Royal College of Physicians (London).

DR. J. LEWKOWITSCH, of Manchester and London, has been appointed examiner in fats and oils, including candle manufacture, to the City and Guilds of London Institute, in place of Mr. Leopold Field.

MR. EDWARD BELLIS, L.R.C.P.I., L.R.C.S.I., of 81 Holland Park Avenue and 1A Portland Road, Holland Park, has been appointed surgeon to the employés on the West London Central Electric Railway, Sections 1, 2, and 3.

MR. W. J. MCCULLOCH ETTLES, eldest son of Mr. J. Ettles, chemist and druggist, of Burnham, Essex, has just graduated M.D. at Aberdeen University. The thesis by Mr. Ettles, "Concomitant Esotropia," was the only one considered by the examiners to be worthy of "highest honours."

AMONGST the successful candidates for the title of Pharmacies who presented themselves at the last examinations at the Faculty of Medicine of the University of Bordeaux was Mr. John Jarvis, son of Mr. Jarvis, chemist and pharmacist, Pau, who was the first Englishman who passed the French examinations at Bordeaux, in 1872.

MR. D. HOOPER has been appointed Government Botanist of the Presidency of Madras, and Mr. W. M. Standen, an ex cinchona planter, Director of the Government cinchona-plantations in Madras, at a salary of 450*r*, rising to 750*r*, a month, with free quarters. Mr. Standen will be given one year's time to qualify in the processes involving the manufacture of cinchona-products, and will then be placed in charge of the quinine factory.

MR. C. H. FRYER, who had been eighteen months dispenser at St. Bartholomew's Hospital, was the only candidate present at the Holborn Board of Guardians' meeting on Wednesday night seeking the vacant appointment of dispenser at the infirmary at Archway Road, which post is worth 70*l*. per annum. He was called before the Board and appointed (on the motion of Dr. Hunter, seconded by Mr. Geo. Eade), subject to the usual inquiries being satisfactory.

MR. BARNARD S. PROCTOR writes an article in the *Free Review* entitled "Our Ideas of Right and Wrong." The essay is philosophical in character, and is an endeavour to attach a definite meaning to the words "right" and "wrong" as ethical terms. As a basis, the writer assumes that actions are right in so far as they promote the total happiness in creation, regarding that happiness as broadly as possible, and wrong in proportion as they detract from that happiness or retard it.

MR. HENRY J. DUKE PRATT, chemist, of River Street, Pewsey, left home on July 30 and proceeded to Swindon, where he filed a petition in the Bankruptcy Court, under which the usual receiving order was made, and he consented to adjudication in bankruptcy. He never subsequently returned home, and up to the present no trace of his whereabouts has been ascertained, but, through certain information which has transpired, it appears that he has left the country. Investigation into his affairs shows that his liabilities are very heavy. Mr. Pratt was well known in the district as a prominent member of the Wesleyan body, holding the position of circuit steward.

A CAMPHOR-FIEND has been discovered on the streets of St. Louis. It was a woman unconscious from the effects of an over-indulgence in camphor, and the discovery brought to light the fact that camphor-eating is a favourite vice with some people out there.



## Trade Reports.

42 CANNON STREET, E.C., August 13

THERE have been very few alterations in the drug and chemical market since our last report, and no change of importance can be expected for the remainder of the month. In fine chemicals we have to report a fresh decrease in price in cream of tartar, while citric and tartaric acids remain firmly held. Acetanilid has been advanced in consequence of the increase in price of crude material. Heavy chemicals mostly unchanged. Hyposulphite of soda is a little dearer, and sugar of lead tends somewhat easier. Carbolic acid displays a firmer tone. Permanganate of potash is extremely scarce, while glycerine is very firmly held and not unlikely to be dearer. Sulphur has advanced for all varieties, while sulphate of ammonia and sulphate of copper are easier. Benzol is again quoted at higher rates. In the drug-market opium remains very firm, but business has fallen off. Crude camphor dull of sale with an easier tendency, especially for arrival. Tragacanth moves steadily and the price of asafoetida is well maintained. Castor oil is somewhat weaker. Cascara sagrada, gentian, orris, and scammony root tending easier. Cod-liver oil firmly held. Oil of star anise a shade firmer for shipment. French oil of lavender is also reported to be advancing. American peppermint oil is again lower, and for new otto of rose considerably easier rates are quoted. Citronella oil is also falling away rapidly. Star aniseed is dearer, and the same may be said of Japan wax; while new Belgian chamomiles appear to have seen their lowest rate for the season. In drysalteries and spices there is little trade. Shellac has sold in moderate quantities, but the tendency at the close is lower. Turmeric offers at low prices on the spot and for shipment. Gelatine is dearer. Gum arabic very much neglected and tending lower all round. Chillies are firmly held. Capsicums quiet. Zanzibar cloves extremely flat. Mace is still declining in price. Nutmegs are fairly well held. Jamaica ginger continues to advance, and native-cut Cochin has been sold at steady rates. On the other hand, the price of Japan ginger is lower. Black and white pepper are very flat, but pimento keeps steady. Quicksilver unchanged. Antimony still tending firmer. In the oil market we have to report a considerable advance in linseed oil, which is now quoted at 17s. 3d. for barrels landed. Rape oil is also firmer, both for crude and refined; and crude cotton-seed oil has slightly improved. Coconut, palm, and olive oils, however, show no change. Turpentine is firmer, 18s. 9d. being now quoted for American on the spot; but petroleum shows no change. The Bank rate is maintained at 2 per cent., and bar silver is rather easier at 31½d. per oz.

Our American correspondent wires on Thursday afternoon:—"Opium is considerably weaker, \$2.40 per lb. being now asked for good *Manufacturing*. The price of *Acetanilid* has been advanced by 2c. per lb. all round. *Cocaine* is also dearer, *Hydrochlorate*, in bulk, being now quoted at 25c. per oz. *Curaçao aloes* continues to arrive in considerable quantities; 2½c. per lb. would be readily accepted for fair quality. *Huanoco coca* leaves of good quality offer at 23c. per lb. *Peppermint oil* is quoted at lower rates all round, the crop being larger than expected. *Senega-root* shows a strong market, although not notably advanced in price. On the other hand, *Mexican sarsaparilla* is easier.

On Friday last, at the High Court of Justice, the appeal was heard of Messrs. Wilson, Salomon & Co. against the decision of the Comptroller of Patents, refusing to allow certain amendments in their Saccharin Patent No. 6,626. 1885, for which they had applied. The Attorney-General (Sir Richard Webster, M.P.) upheld the decision of the Comptroller and dismissed the appeal, allowing costs against the appellants. We are also informed by Von Heyden's Chemische Fabrik that the Royal "Landgericht" at Dresden has dismissed the suit brought by Messrs. Fahlberg, List & Co., of Salbke-Westerhüsen, against Messrs. von Heyden for infringement of patent in Germany, and has awarded costs against the plaintiffs.

ACETANILID has been advanced by 1d. per lb., 1-cwt. lots being now quoted at 1s. 3d.; smaller wholesale quantities at 1s. 4d. per lb.

ACID (CARBOLIC) appears to be tending decidedly higher and further sales such as referred to in our last issue continue to be made. The lowest quotation for 34° C. to 35° C. crystals is at present 6½d. per lb., while for 39-40° C. 6¾d. per lb. is asked. Crude, 60 per cent., 2s.; 75 per cent., 2s. 5d. per lb.

ACID (CITRIC)—Firm, but unchanged in price, at 1s. 2d. to 1s. 2½d. per lb., according to holder. *Concentrated juice* offers at 13l. 15s. per pipe, f.o.b.

ACID (TARTARIC).—Firmly held, at 1s. 3d. per lb. for English B.P., and 1s. 2d. for foreign.

ASAFOETIDA.—The demand seems to have fallen off, and no business is reported this week, although prices remain high. Good soft pinky gum, block or free, is quoted at 60s.; fair quality at from 45s. to 50s. per cwt. It is thought that higher rates will prevail shortly.

BALSAM TOLU.—Tending upwards, 2s. 9d. per lb. being now asked for good genuine quality, which is 1d. above the recent quotations. No business, however, is reported at that figure.

BORAX.—The parcel of Townsend's borax sold at auction last week was in powder, not crystals.

CAMPHOR (CRUDE).—The market remains quiet, with an easier tendency for forward delivery. On the spot quotations are nominally 107s. 6d. for Formosa and 125s. for Japan. For *Formosa*, August-September steamer shipment, 100s. per cwt. c.i.f. is asked, a bid of 95s. having been refused, it is said.

CASCARA SAGRADA.—Very dull of sale, 20s. remains the nominal spot quotation, but we understand that 14s. 6d., c.i.f. terms, sailer shipment from San Francisco, would be accepted.

CHAMOMILES.—There has been a slight upward turn in the quotations of Belgium chamomiles this week. A few days ago good pale new crop flowers were being offered at from 45s. to 48s. 6d. per cwt.; but to-day some of the agents have raised their price to 50s. or 51s. per cwt. The agent who quoted 45s., however, still maintains that figure.

CIVET.—Genuine quality still remains very scarce. Some holders quote from 40s. to 42s. per oz., but others offer "guaranteed genuine" at 35s. per oz.

COCA-LEAVES.—There has just been a new arrival of 42 bales from Salaverry, in Peru.

COLOCYNTH.—Very firmly held at 3s. per lb. for best pale Turkey apple.

CREAM OF TARTAR still declining. To-day's quotation for best white crystals from Bordeaux is 82s. f.o.b. On the spot the quotation for best white crystals is 89s. to 90s., and for powder 92s. to 95s. per cwt.

GELATINE has been advanced in price by about 5 per cent. lately. Quotations now range from 9½d. to 1s. 7½d. per lb. for white, and from 1s. 6½d. to 1s. 8½d. per lb. for red.

GENTIAN-ROOT.—Tending lower; good new *French* root offers at 19s. per cwt., but that price cannot apparently be obtained.

GLYCERINE.—Extremely firm for all varieties. Holders of crude glycerine do not care to sell quantities even at the



present rate of quotations. German distillers quote from 74s. to 78s. per cwt. for s.g. 1.260, but in second hand there are still sellers at 73s. per cwt.

**GUM ACACIA.**—To-day's public auctions comprised 10 catalogues. Only about 3 per cent. of the quantity offered found buyers, on the whole at rather easier prices. It is said that there never has been a gum sale at which so small a proportion of the goods offered was disposed of. The market is slightly steadier for *Persian*, and small sales of ordinary sorts have been made at full rates. Fine pale picked is quoted at from 20s. to 23s.; ordinary to fine sorts at from 12s. to 16s. per cwt. *Soudan* sorts are quite neglected at nominal prices, from 60s. for common glassy and dusty, up to 85s. for fine pale soft. Small sales of third Trieste picked gum have lately been made at 6l. 10s. per cwt. The lots sold included 7 packages good brown *Barbary* gum at 45s. per cwt., and 10 bags fair *Aden* at 42s. 6d. per cwt. For *East Indian* gum the following prices were paid:—Good pale *Ghatti*, 38s. per cwt.; ordinary red *Karachi Amrad*, 25s. to 27s.; good siftings, 31s.; brown mouley gum, 28s., and good bold *Oomra*, 29s. per cwt.

**GUM TRAGACANTH** continues in fairly good demand, especially for common grades. First pale quality *Persian* is quoted at from 14l. to 14l. 10s.; seconds at 12l. to 13l. per cwt.

**INSECT FLOWERS.**—Very firmly held. The prices for new crop are as follows:—Open flowers, from 90s. to 94s. per cwt., f.o.b.; half-closed, from 105s. to 115s., f.o.b.; and closed flowers, according to quality, from 150s. up to 185s. per cwt., f.o.b. The last are for the small so-called wild closed flowers.

**KINO.**—A very quiet market. There has just been a fresh import of 400 lbs. of the *Zambesi kino*, to which we referred some time ago in our editorial pages. Good genuine *East Indian* Kino sells privately in a small way at 12s. per lb.

**KOLA.**—We hear that a parcel of fresh *African* kolas, which was imported some time ago, has been sold privately this week at the rate of 1d. per lb., and that another lot of 2 tons is offering at 1½d. per lb.

**LEAD (ACETATE).**—The Convention quotations have recently been changed, inasmuch as the quantity entitling holders to the bottom price has been reduced from 10 to 5 tons. *White* is now quoted as follows:—Large or small crystals in 5-ton lots 22s., c.i.f., and smaller wholesale quantities 23s. 3d. to 23s. 6d. per cwt., London terms.

**MANNA.**—Prices for new crop manna are daily expected.

**MATICO.**—Good bright thick leaf is extremely scarce. Holders require as much as 1s. 6d. per lb. for this variety. The two parcels of inferior matico which were offered for sale last week are still on the market, as indeed they have been for the last few years.

**MUSK.**—A few caddies of fine bold thin skin *Tonquin* pods, of first pile, have changed hands privately at 73s. per oz.

**OIL (CASTOR).**—Rather easier, and without buyers. First *Calcutta* is quoted at 3½d. to 3¾d., while for seconds not over 3d. per lb. could be obtained, though some holders still ask 3½d. The stock of castor-oil in India is said to be unusually small, and the output has been much impeded by the rains.

**OIL (COD-LIVER).**—Our Bergen correspondent writes on August 8 that the market remains very dull, with little or no business, the quotations being: *Lofoten*, best new season's non-congealing, 165s. per barrel f.o.b.; *Finnmarken* ditto, ditto, 160s. f.o.b. The exports from Bergen up to date are 2,900 barrels, against 3,200 barrels in the corresponding period of 1895. *Newfoundland* oil of good quality has sold lately at 5s. 6d. per gallon. It may be noted that the average of this oil is now much higher than was the case in former seasons, some of it now running the Norwegian quite close in point of quality. For best non-congealing *Norwegian* oil 170s. per barrel is quoted on the spot, and 150s. for second quality.

**OIL (MIRBANE).**—Very dull of sale, at from 6d. to 7d. per lb., according to quality, for good *English* oil.

**OILS (ESSENTIAL).**—*American oil of peppermint* is still tending downwards; on the spot *HGH* oil is offering at 8s.

per lb. (for large quantities even less might be accepted), and *Wayne County* oil, in bulk, according to brand, at from 5s. 6d. to 6s. per lb. net. The *Lavender* crop in France is now being distilled, and it is said that the plants are yielding 25 per cent. oil below the average all round, and on that account it is expected that prices will shortly rule somewhat higher. *Star-anise oil* is still quoted at 7s. 6d. per lb. on the spot, without finding buyers, while for July-August shipment 6s. 10d. per lb., c.i.f., is the quotation, which is slightly higher than last week. *Cassia* oil firm, but unchanged. The prices of the new *Otto* of rose have not yet been fixed, except as regards *D. Pappazoglou's* brand, which, we hear, is offering at 28s. per T. oz., about 6s. below last year's price. The accumulated stock of an Algerian grower of *Geranium* oil, representing the output of several years, is being offered for sale on the Paris market, but no buyers can be found for it. *Dalmatian oil of rosemary* is again quoted slightly higher, 185s. per cwt., f.o.b. Trieste, being the current quotation. The arrivals of *Citronella* oil have been somewhat heavy lately. The *Don* has brought one package of *lime* oil from Dominica this week. New *Mitcham chamomile* oil is quoted at 42s. to 45s. per lb., showing an advance on the last season's rates. New *Oil of black peppermint* offers at from 30s. to 32s. per lb., but the price of *Lavender* does not appear to have yet been settled. New *Bourbon Rose-geranium* oil offers at 19s. per lb. *Citronella* oil is still tending downwards. On the spot 1s. 3d. to 1s. 4d. per lb. is asked (nominally), and for shipment over the whole of the year 12d. to 12½d. per lb. would be taken.

**OPIUM.**—The position of the London market is practically unchanged since last week. There is very little business doing, but holders are firm. The week has been very quiet in London, not because there is an easier feeling in the market, but because holders' views are too high to admit of business. Quotations remain nominal, from 11s. 6d. to 13s. 6d. per lb. for good to fine *soft shipping*; 9s. 6d. to 10s. 6d. for *ditto Smyrna*; 8s. 3d. to 8s. 9d. for second *Druggists'*; and from 9s. to 9s. 9d. per lb. for *Constantinople* sorts. *Persian* is firmly held for fine qualities, for which 12s. per lb. is asked.

**ORRIS.**—The quotations for new *Italian* root appear to be falling day by day. Best picked new *Florentine* is now freely quoted at 55s. 6d. c.i.f. terms, without finding buyers.

**POTASH SALTS.**—*Permanganate* is very difficult to obtain on the spot, all the makers being behindhand with their deliveries. Small crystals have been sold at 77s. 6d.; large ditto at 82s. 6d. per cwt. *Chlorate of potash* very weak and dull of sale, at 4½d. to 4¾d. per lb. *Cyanide* offers at 12½d. per lb. for 98 per cent.

**QUICKSILVER.**—Steady, at 6l. 7s. 6d. per bottle from the importers, and about 6d. below that figure from second-hand holders.

**QUININE** remains a dead letter; 12½d. per cz. is the nearest quotable price for second-hand *German* bulk.

**SCAMMONY-ROOT** is offering somewhat more freely and prices are rather easier; 40s. per cwt. seems now the nearest quotation.

**SENNA.**—The only arrival of *Tinnivelly* senna since our last report has been one of 28 bales, per *Thames*, from Bombay.

**SHELLAC.**—Only 600 cases were offered for sale on Tuesday, of which 356 sold, partly without reserve, at steady rates, the last auction price being obtained for sound quality, while fresh water-damaged block sold with excellent competition at very high rates. The following were the quotations:—Second *Orange* cakey to free good bright, 87s. to 89s.; dull pale free, 87s.; red curly and cakey, 85s. to 86s.; dark red, 83s. per cwt. The damaged lots realised from 75s. to 78s. for ordinary red *Orange*, 86s. for good curly orange, and 95s. for good free S G in diamond. 84 cases blocky damaged *Garnet* lac realised from 59s. to 78s. Since the auctions a fair demand has prevailed on the spot at steady rates, but the speculative market remains very dull. The closing quotations are 89s. per cwt. for fair T.N. *Orange*; 84s. for free and 82s. per cwt. for blocky A.C. *Garnet* lac. Sales of good firsts *Button* lac have been made at 97s. per cwt. on the spot. For



the best brands of fine *Orange lac* 105s. to 110s. per cwt. is asked.

**SODA SALTS.**—There has been an improvement in the price of *Hyposulphite of soda*, for which the demand continues extremely strong. The English manufacturers have slightly raised their quotations, and now ask from 7l. 2s. 6l. up to 7l. 15s. per ton, according to quantity. Foreign brands may still be had at 5s. below these figures all round.

**STAR ANISE.**—As much as 70s. has lately been paid on the spot, showing a higher market, but holders now ask more money. For arrival the nearest quotation is 78s. per cwt. c.i.f.

**TEA.**—The tea-market has had a very liberal supply alike of Assam and Ceylon this week, but has taken all that came forward with good competition, and at steady, to in some cases firmer, rates. There is a growing opinion that common tea will not be by any means too plentiful in view of the good quality of the Indian crop, and Assam teas under 8d. are  $\frac{1}{4}$ d. per lb. dearer; finest sorts have sold at very high prices, but good medium teas from 10d. to 1s. 1d. are coming down to a reasonable range of prices, and some very useful Pekoes of the new crop can now be bought and will freshen up blends of last season's teas.

**THYMOL.**—Low in price, the quotations ranging from 6s. 3d. to 7s. per lb., according to quantity.

**TONCA BEANS.**—The exports of tonca beans from Ciudad Bolivar, Venezuela, in 1895, amounted to 27,265 kilos., worth 17,760l.

**VANILLA.**—It is said that the *Mauritius* crop of the present year will again be a small one.

**VANILLIN** is held from 16s. to 16s. 6d. per oz.

**WAX (BEES').**—Several lots of *Madagascar* have changed hands privately this week, at rather easier rates—from 6l. 7s. 6d. per cwt. for clean dull greenish up to 6l. 12s. 6d. per cwt. for fine yellow. *Chilian* wax is also quoted at somewhat easier rates. *Bombay* varieties of beeswax remain neglected.

**WAX (JAPAN)** dearer. A sale of good pale squares was reported a few days ago at 37s. 6d. per cwt., and since then it is said that 40s. per cwt. has been paid, but no particulars of that transaction are given. The stock in the public warehouses is very small. For shipment 37s. 6d. per cwt. c.i.f. is the nearest quotation.

#### Heavy Chemicals.

Business in the heavy-chemical market has been rather quiet again during the past week. At the same time, the positions of the various products continue to be fairly steady, with the exception, perhaps, of *Bleaching powder*. The Board of Trade returns for July show that there has been a continued decrease in the exports of *Alkali*, both when compared against the same month in 1894 and 1895. This year the total reached 351,753 cwt., against 491,591 cwt. in July last year, and 444,000 cwt. in July, 1894, or a decrease of 28.4 per cent. and 20.8 per cent. respectively. This decrease is mainly attributable to the falling off of the trade to the United States, owing partly to the condition of business and partly to the increased manufacture over there. With regard to alterations which have taken place in the position of individual products, the following may be noted:—*Recovered sulphur* has advanced to 4l. 7s. 6d. per ton, and is very firm thereat. *Sulphate of ammonia* has declined slightly, and continues very dull. Present quotations are: Beckton 7l. 12s. 6d., Leith 7l. 12s. 6d., and Hull 7l. 15s. 303 tons were exported from Leith during last week. *Benzols* continue very strong, and a further advance is to be reported—90 per cent. prompt and August, 3s. 10d.; September–December delivery, 3s. 9d.; January–June, 3s. 6d.; and 50 per cent. prompt, 2s. 10 $\frac{1}{2}$ d.; September–December delivery, 2s. 9d.; January–June, 2s. 7 $\frac{1}{2}$ d. *Cream of tartar* is lower; powdered 92s. to 95s., and crystals 90s. *Caustic soda* is in strong demand, at unchanged rates. *Soda ash* and *Soda crystals* a trifle dull. *Sulphate of copper* has dropped lower than is usual at this time of the year and now stands—Anchor, 17l. 5s.; Liverpool, 16l. 5s. to 16l. 10s. *Salteake* selling freely. *Yellow Prussiate of potash* in fair request. *Arsenio* continues scarce. *Chlorate of potash* a trifle firmer. *Alum* and *Sulphate of alumina* in brisk demand. *Hypo-*

*sulphite of soda* steadier. *Barium* compounds firm and in demand. *Silicates of soda* tending upwards. *Bichromate of potash* steady; *Bichromate of soda* somewhat scarce. *Saltpetre* quiet. *Sal ammoniac*, both first and second quality, moving steadily. *South Durham Salt*, heavy demand. *Carbonate of ammonia* steady. *Nitrate of lead* dull. *Acetates of lead*, fair demand.

#### The Liverpool Drug-market.

Our Liverpool correspondent, writing on August 12, says that the *Soudan* descriptions of *Acacia gums* are in poor request, the demand showing very little animation. *Soudan* sorts offer at about 85s. for good medium quality, but no business is reported; medium kinds are still very scarce, and the small stock is rather firmly held. *Canary-seed* remains steady; good bright Turkish is firmly held for 28s., at which price considerable parcels have changed hands. *Pot-ashes* are without much movement at 20s. to 20s. 3d., and *Pearl-ashes* offer at 35s. per cwt. *Castor oil* is in a slightly better position for good seconds Calcutta, the value to-day being  $3\frac{1}{2}$ d. to  $3\frac{1}{4}$ d. per lb., some holders even asking a shade more; the stock on the spot is very limited; Belgian first-pressing is offered at  $2\frac{1}{2}$ d.; first-pressing French  $2\frac{1}{2}$ d. to  $2\frac{3}{4}$ d., and second-pressing  $2\frac{1}{2}$ d. per lb.; Madras is held for prices varying from  $2\frac{1}{2}$ d. to  $2\frac{3}{4}$ d. per lb. *Cream of tartar* is selling slowly at 94s. per cwt. for ordinary first white, with guarantee of bitartrate of potash. *Linseed oil* is tending slightly in sellers' favour at 17s. 6d. to 18s., according to quality. *Spirits of turpentine* meet with a steady sale at 19s. 6d. per cwt. *Kola nuts*: a parcel of 12 bags dry realised 2d. per lb. *Beeswax*: *Chilian* has been easier during the week; mixed quality has sold at 7l. per cwt.; *Sierra Leone* at 6l. 12s. 6d. to 7l. per cwt. Some common *Sierra Leone Chillies* sold at 24s.; good bright are still worth 35s. to 40s. per cwt. *Cochineal*: *Teneriffe* blacks in small supply and held for 1s.  $3\frac{1}{2}$ d. per lb. Further sales of *Russian Anise* have been made at 22s. 6d. per cwt. *Sulphate of copper* is offered at prices ranging from 16l. 10s. to 17l. per cwt. *Chilian Spermaceti* of prime quality is held firmly for 1s. 4d. per lb. Of 8 serons *Carthagena Specaacantha*, at auction, 3 were sold at 4s. 6d., and the balance is firmly held for 4s. 9d. per lb.

#### The Amsterdam Market.

Our Amsterdam correspondent writes that the Java cinchona auctions which will be held in Amsterdam on August 27 will consist of 6,152 packages of Java bark, weighing net 566,897 kilos. This bark contains the equivalent of 31,029 kilos. sulphate of quinine, the average of the manufacturing varieties being high—viz., 5.63 per cent. The present stock in Amsterdam consists of 2,218 packages of Government bark and 11,664 packages of private-grown barks. This includes the quantity to be offered on August 27. The bark shipments from Java have been as follows:—

	1896	1895	1894	1893
July .. Amst. lbs.	1,074,000	548,000	£58,000	680,000
January to July Amst. lbs.	5,050,000	4,316,700	4,701,000	4,740,000

#### The Hamburg Market.

Our Hamburg correspondent writes on August 11:—“There are not many changes in our drug-market since last week. *Cape aloes* is unchanged, at 57m. to 58m. per 100 kilos. *Antimony* is very firm, at 36m. to 37m. *Citric acid* steady; best English, 260m. per 100 kilos. *Arsenic* continues very firm. *Balsam copaiba* is steady; best pure quality, 3.30m. to 3.45m. per kilo. *Balsam (Peru)* quiet, at 15 $\frac{1}{2}$ m. per kilo. *Camphor (refined)* does not show much business; holders ask 310m. to 315m. per 100 kilos. *Cascaragrad* is quiet, at 32m. to 33m. per 100 kilos. *Chlorate of potash* unchanged, at 82m. per 100 kilos. *Cassia lignea* remains firm, at about 66m. per 100 kilos. for prime qualities. *Ergot of rye (Russian)* steady, at 90m. per 100 kilos. *Cantharides (Russian)* quoted 4.40m. per kilo. *Glycerine* remains very firm, and shows a good demand. *Gum acacia* very steady, but only little business doing in this article just now. *Honey* is quiet; *Chilian* varies, according to quality, from 20m. to 22m. per 50 kilos.; *Peru*, at 15m. to



18m. *Menthol* is quiet, at 19m. to 20m. per kilo. *Opium* is dearer, and quoted to-day from 21½m. to 22m. per kilo. *Cod-liver oil* steady; non-congealing oil is quoted to-day 165m. to 170m. per barrel. *Peppermint oil*, HGH, is quiet at 8½m. per lb; Todd at 8½m. per lb; Japan oil at 8½m. per kilo. *Star anise oil* quiet, at 16m. per kilo.; *Cassia oil* at 12m. to 13m. per kilo. *Star anise seed* quoted to-day 170m. to 180m. per 100 kilos. *Wax (Japan)* firm, at 74m. to 75m. *Wax (Carnauba)* quiet; grey is offering at 160m., medium at 170m. to 180m., yellow 200m., per 100 kilos."

#### The Smyrna and Constantinople Opium-markets.

Our Constantinople correspondent writes on August 7:—"The opium-market has relapsed once more to the apathetic state which had characterised it for some time previous to the late upward rush in prices. There are sellers for *Druggists'* kinds at 9s. 5d. to 9s. 6d. per lb., f.o.b., but no buyers. This state of things is to be expected after a sudden and considerable rise. *Salonica* has yielded 600 cases, 500 of which are seconds (only suitable for manufacturing-purpose) and only 100 first quality. The arrivals up to date of new *Tokat* grades show a considerable falling-off in quality, and contain only 15 to 30 per cent. of firsts, as compared with 50 to 60 per cent. firsts last year. This is owing to the heavy rains at the gathering season." Our news from Smyrna is dated July 31. Our correspondent observes that during the month the sales have been rather heavy—viz., 440 cases, of which 250 were taken by American agents, 90 for export to England and other countries, and 100 for local dealers and speculators. During the last days of July large American orders have been received in Smyrna, but only a portion of these has been executed, as the Smyrna holders, acting on instructions from their principals in the growing districts, have withdrawn the bulk of their supplies from the market. Some of the American agents have, however, filled their orders in Constantinople. The opinion seems to prevail that prices are likely to advance gradually to the parity of 11s. per lb. for new manufacturing opium, which is at present quoted at 10s. 1d., f.o.b. The total stocks of old and new opium in Smyrna are now only 1,650 cases; the arrivals from the interior to the end of July have been 591 cases, against 1,385 at the same time of 1895. The market closes firm, with a rising tendency. The harvesting-operations in the lower growing-districts were drawing to a close, the severe thunderstorms at the end of July being responsible, it is said, for a further loss of about 100 cases. On the whole, it is pointed out that on no previous occasion has a harvest been known to start under such favourable auspices and to be gradually reduced by unfavourable weather. It has been decided that the brokerage on opium sold will in future be borne by the sellers.

#### Cyanide of Potash.

The manufacture of cyanide of potassium, an industry in which Glasgow capitalists had formerly almost a monopoly, has recently suffered material charges. The Witwatersrand gold-mining companies are the chief consumers of the chemical, and those concerns have lately been getting the principal part of their supplies from new factories in Germany. As a consequence of this rivalry the price of the 98-per-cent. cyanide has fallen about 40 per cent. The exports from Germany to South Africa, which a few years ago were only nominal, have now risen to over 50 tons a month, and they form one of the most growing items in the German trade with the Transvaal. Consumers explain their preference by stating that the Germans manufacture a purer chemical at present prices than can be obtained from the British producers. As the consumption of cyanide in gold-mining is extending through the introduction of the dry-reduction process to poor ores, and also through the use of various forms of direct treatment, this would seem to be a serious matter for the British chemical industry. Attempts are being made to improve the methods of gold-extraction by mercury, obviating the use of water and battery "plates"; but cyanide has the advantage of being considerably cheaper than mercury, and with the development of gold-mining in Western Australia and elsewhere the consumption of cyanide seems certain to increase. An English company was floated a short time ago to work a process by which it was claimed cyanide of potassium could be produced at 10d. per lb., but it does not appear to have yet achieved any practical success.

## The Arbitration Clause in Contracts.

THE Drug Club, through their President, have replied to the letter of the President of the General Produce Brokers' Association on the subject of the proposed modification of the arbitration clause. We have already given the substance of the G.P.B.A. letter in our issue of August 1, but we now print below that letter, with the answer thereto, of which copies have been courteously forwarded to us by Mr. R. B. Barron:—

The General Produce Brokers' Association of London.

London, July 28, 1896.

To the Chairman of the Drug Club.

DEAR SIR,—At a meeting of the committee, held on July 13, to consider the matter of the suggested alteration of the arbitration clause at present in force in contracts made by members of this Association, a sub-committee was formed to thoroughly discuss the proposals made by the drug-trade and the Chemical Section of the London Chamber of Commerce.

The sub-committee now report that it is their unanimous opinion that it is not desirable or necessary that any alteration should be made in the present revised arbitration clause; but they recommend that an agreement should be made that in the event of an arbitration being called for on contracts for drugs or chemicals, either disputant shall have the right to call in experts to give evidence before the arbitrators, and the expense, if any, is to follow the award. This report was submitted to the general committee on the 27th, and agreed to.

I beg to express a belief that this arrangement will altogether prevent trouble in future, and I trust you will be satisfied that everything possible has been done to meet your views.

Will you kindly communicate the result to the Chemical Section of the Chamber of Commerce?

I am, dear Sir, yours faithfully,

ANDREW DEVITT,  
President, General Produce Brokers' Association.

Drug Club, August 7, 1896.

To the President of the General Brokers' Association,  
Mincing Lane, E.C.

#### Arbitration Clause in Contracts.

DEAR SIR,—I am in receipt of yours of July 28, intimating that the sub-committee appointed by the Association to take into consideration the revision of the arbitration clause as discussed with a deputation of the Drug Club did not recommend the adoption of the alteration proposed. I note that the general committee of your Association agree, in so far as contracts in drugs and chemicals are concerned, that either disputant shall, in the event of an arbitration, have the right to call experts to give evidence.

This proposition will enable arbitrators to have chemical as well as commercial data before them prior to their decision, whereas formerly all the facts were not wholly brought out unless on an appeal to the committee of your Association.

The advantages of such an amendment are self-evident, and the alteration should result in more complete justice to disputants.

In reference to the suggestion of the deputation of my Club that arbitrators should be drawn at option either from drug-brokers or members of the wholesale drug-trade, I am of opinion that sooner or later your Association will be compelled to adopt this, the only fair basis of arbitration, and the sooner there is a recognition of this by your Association the better it will be for all concerned.

I think it more fitting that you should send a reply to the London Chamber of Commerce, rather than I should communicate the substance of your letter of July 28 to the Chamber as you propose.

I am, dear Sir, faithfully yours,

RICHARD BANKES BARRON,  
President of the Drug Club.

AN ARECA-NUT PEST.—Dr. George Watt, C.I.E., Reporter on Economic Products to the Government of India, is engaged on a research into the life history of a fatal fungus which has been recently discovered on the areca-nut trees over a large area of Southern Bengal. He has already been partly successful in discovering its *modus operandi*, and is hopeful of finding a method of circumventing it. This is a matter of no little moment to India, as the "betel-nut" is an essential constituent of the universal masticatory—*pan-supari*—of the East.





### Memoranda for Correspondents.

*In letters for publication correspondents are requested to express their views as concisely as possible.*

*Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.*

*The name and address of the writer should accompany all communications with, if desired, a distinctive nom-de-plume.*

### Mr. Boot Explains.

SIR,—With reference to the paragraph in your journal of last week *re* my firm, I should like to say that the label we affixed to Scott's pills was got up hurriedly—on the spur of the moment—and was not intended to advertise any particular article so much as to protest against the principle involved in our submitting to the dictation of a ring.

We have no feeling against Scott's pills or the proprietors thereof, although in this matter they have treated us with scant courtesy. In fact, after sending them an order, on their declining to fill it unless we signed their own special agreement, we signed it; but instead of supplying the pills as they had promised to do, they now seek to impose upon us another agreement covering a dozen articles with which they have no concern as between us and the proprietors.

We have modified the label to the extent you will perceive on the copy enclosed,\* and we should be very pleased to discontinue labelling Scott's pills altogether at any time when Messrs. Lamberts are willing to treat with us independent of the ring. We are by no means favourable to this labelling of other people's preparations, and would not do so as a mere advertisement. It is not a question of profit that leads us to adopt it, but a question of enforcing our rights.

Speaking frankly for myself, I may say that it appears to me a very short-sighted policy our business opponents are pursuing with regard to this portion of the trade. The old proverb about the dog who dropped his meat in the stream to try to grip the shadow is not inapplicable here. Suppose it were possible to cut off from us entirely supplies of all proprietary goods. We have an immense business and a capital of over 200,000*l.* embarked in the wholesale and retail trade, and we are not going to let it lie idle or our organisation to get rusty.

Rather than be defeated we are prepared, if need be, to buy all proprietary articles at full retail prices, and label every one of them to inform the public of the point at issue between ourselves and the ring, recouping ourselves for any loss of profit on these by concentrating our whole attention on the sale of drugs and chemicals.

Take the article immediately under consideration as an example. In (say) Nottingham there are some sixty chemists, and if they had our whole sale of Scott's pills in that town divided among them it would not amount to one box each per week, on which they would make 2*d.* There is no drug which has the least popular sale on which they do not make at present prices far more profit than this, and on which they would feel the full force of our competition if we directed our whole energies to this department.

Further, our sale of Scott's pills would not be diverted equally among the sixty chemists. Some would not sell any, but all sell drugs, and would be adversely affected if such a competition was forced upon us.

This is only an example taking one article, and the effect would be multiplied at least as many times as there are popular proprietary articles if the movement spread and embraced the whole of them. Yours faithfully,

Nottingham, August 11.

JESSE BOOT.

### The "Fallacies" of Anti-cutting.

SIR,—Some rather curious fallacies underlie most of the letters with which your correspondents are lately favouring the world, on the subjects of cutting and anti-cutting, substitution and anti-substitution, and the various topics allied, or thought to be allied, thereto.

Your correspondents all seem to think that manufacturers of proprietaries favour cutters and drug-store men in some exclusive manner to the detriment of the trade calling itself legitimate; and they seem to think with equal unanimity that the retail pharmacists are the only friends of the said manufacturers—that it is *they* who have created the present extensive vogue of patent medicines, &c., of the largely-advertised class, and have consequently a claim in perpetuity on the affection and gratitude of the owners and advertisers of the same. The gentlemen who have addressed you show otherwise a most healthy divergence of opinion, which moves them to contradict each other (and not infrequently themselves) with great freedom and emphasis; but when they do agree, their unanimity is wonderful. They are fully agreed that the drug-store man, so far from being the friend, is the enemy of the maker of specialities, and ought by him to be hated and feared with the hatred that they themselves exhibit so freely, and the fear that they endeavour so unsuccessfully to dissemble; that it is from the chemist, not from the drug-store man, that the manufacturer gets aid and co-operation; that Codlin's the friend, not Short.

I am not a patent-medicine proprietor; I wish I were—nor a drug-store keeper; I am glad I am not. But I *am* a student of THE CHEMIST AND DRUGGIST, and an admirer of its many excellences—correspondence column and all. But, as one who among all the noise and fuss that has lately been made over the partition of the mountain of trade reactionism, producing that peculiarly diminutive mouse the anti-cutting scheme, lately born with a flourish of trumpets singularly ill-fitted to the accouchement chamber; as one who has seen from the first, but hitherto in an amazed silence, the futility and impracticableness (at this time of day) of any remedy from outside the trade for evils inside, for which the trade, at the outset, had only itself to blame; as such, I crave the hospitality of your ever hospitable columns for an attempt, perhaps not altogether hopeful, to convince the section of the trade that rushes so readily into print of the grave errors which an imperfect appreciation of the facts has engendered.

Consider, for example, the gratitude which they demand from advertisers of proprietaries. Is it really true that the enormous sales of patent medicines and the like are due to the friendly offices of chemists? I apprehend that in only a very small degree is this true. The greatly preponderating element of the success attained by these goods is the expensive advertising by which the public has been made aware of them, and (since it is a commonplace among advertising-experts that to advertise rubbish is useless) the merit, great in degree or small, possessed by the goods themselves. I do not attempt to apportion these elements; but when you consider that 150*l.* is by no means an uncommon sum to be paid for a single advertisement in a single newspaper of articles which bring to the manufacturers something like 8*d.* apiece net (allowing for the 1½*d.* stamp), it is clear that repeated purchases by customers thus captured must be counted upon as a virtual certainty by the advertiser. And people do not buy again and again things that are of no use, ray, of which the usefulness is not perfectly unmistakable at the first trial. Do you, gentlemen (I would ask your correspondents), imagine that the public would call winter after winter for your own admirable cough-linctus, your own excellent antibilious pill, if they did not, with affectionate thankfulness, recognise the benefits thereby conferred in the past?

It is quite true that chemists were, until a few years ago, the sole distributors to the public of patent medicines. But then, until a few years ago (as we are always being told), they got a fair profit on them. If chemists were, as they allege, friendly to the goods then, they made (by their own admission) a profit out of their friendship—a profit which they obtained without risk, as the result of very large risks borne by the advertiser. So that the gratitude, if we are going to talk about gratitude, is not due on one side alone;

\* See note under English News.—ED. C. & D.



and if it is due now for past favours, since admittedly withdrawn by chemists, much more is gratitude due on *their* part for the profits that they used to obtain, and that, if they obtain no longer, they have relinquished by their own act, willingly or unwillingly, certainly not by any act of the advertisers. But, as a matter of fact, the advertising itself is what created the sale. The public *will* have advertised goods. If it cannot have them in one place it will have them in another, and chemists are just now doing their very best to drive the public away from their own counters altogether—not for patents alone. As for the chemists' share in building up these big businesses, is there a single patent medicine of large sale that has not been extensively and expensively advertised at the sole cost of its proprietors?

The favour said to be shown by the latter to drug-store men is purely illusory. The store man pays exactly the same wholesale price, taking a given quantity, as the chemist. He gets no longer credit allowed him—indeed, he generally takes less. In fact, so far is he from being favoured (even indirectly) in consequence of his larger purchases, that the whole tendency of the medicine business is to reduce to a minimum the quantities required to be taken in order to secure bottom prices, whereby the chemist, the buyer of small parcels, is actually better treated than the big drug-store man, who, buying in larger quantities, has a larger investment to make, and saves the manufacturer both trouble and expense in packing, forwarding, and book-keeping. The direct advantage to the manufacturer, of having his goods brought to the public at a minimum price seems never to occur to your correspondents. Yet it is a real and very tangible advantage. Anything sells better cheap than dear; even a fractional advantage is an advantage. The drug-store man sells patent medicines, &c., cheap. Yet we are told that he is the enemy of the manufacturer. The chemist does his level best not to sell them at all. Yet we are told that he is the manufacturer's friend. Really, for a learned profession, pharmacy is singularly deficient in logic; just as—for a profession so particular, as it affects to be, about confining every function to its proper sphere—it is strangely oblivious of the rights of other professions, when its members complain (as in the letter of Mr. J. W. Taplin, of Harlesden, last week) that the public is led by "specious" advertisements to buy patent medicines instead of going (I quote Mr. Taplin) "to the doctor *or* chemist for advice and medicine" when unwell. I was always under the impression that the doctor was the right person to give medical advice. I wonder whether doctors are expected to be grateful as well.

These, Sir, are home truths. I do not conceive so meanly of you, or of your readers, as to suppose that they can be resented; but if I prolong this communication further it is resentment, and not gratitude—that rare sentiment—which will be justly excited. But I, Sir, shall be grateful if, by its appearance in your own brilliant columns, you confer its only claim to distinction upon this too lengthy letter.

I am, your obedient servant,  
AMICUS CURIAE. (143/60)

#### Carter's Little Liver-pills and Substitutes.

SIR,—The letter from the agent of the Carter Medicine Company in your last week's issue\* will come as a painful surprise to those in the trade, who, notwithstanding any views which the Carter Medicine Company may hold on cutting, have always been accustomed to be respectfully treated with by their European agent. The writer of the letter does not hesitate to impute a lack of business integrity to your correspondents. If I were to enter the office of the agent of the Carter Medicine Company and tell him that his "commercial conscience appeared to be capable of being reinforced by certain financial considerations," I should expect to leave the premises in a manner more or less undignified, and yet this is what he accuses your correspondents of. Mr. Richards then tells us that he has been seized with zeal for our soul's health. Apparently he has diagnosed the disease, and has found the remedy, for does he not say "I propose to offer them the reinforcement necessary, and thus conduct them to the right path"? Apparently not

satisfied with the slur thus cast upon the "commercial conscience" of his customers, he makes an offer, from which one would judge that his opinion of the business capacities of the retailers of his article is no better than that of their ability to be honest without being paid for it. He writes, "I shall, therefore, have pleasure" (I think he might have added "very great pleasure") "in supplying on the lowest terms Carter's little liver-pills in so small a parcel as a single gross on the simple conditions (a) that each order be accompanied by a remittance for its very modest amount, and (b) a letter promising to abjure and discountenance the sale of all substitutes and imitative preparations designed to replace the said Carter's little liver-pills." In other words, for the blessed privilege of being able to buy at the same rate as the cutter, and sell at the same rate at the magnificent margin of about 5 per cent., the small retailer is required to sign away his freedom as a trader, and must pledge himself never to put up or sell a little liver-pill other than Carter's; whereas his competitor, the big cutter, is free to substitute to his heart's content, for we presume from Mr. Richards's letter that five-gross buyers have not to give the undertaking in question. I wonder if this is Mr. Richards's way of adding insult to injury, for I should consider that so long as there is a vacancy in any one asylum in the British Isles, there is no trader at large who would be foolish enough to enter into such an arrangement. What about, too, the agent for the Carter Medicine Company's principle, of which we have heard so much lately, that a maker has no right to place restrictions on the buyers of his article. It would appear as if Mr. Richards has not very much confidence in the efficacy of the largely-vaunted injunctions which have been advertised to the trade, and which we gather have not been contested by the defendants. If the Carter Medicine Company have the legal right to the sole use of the title "Little Liver-pill," why is it that they make their beneficent offer subject to the voluntary undertaking on the part of the retailer not to sell his own? I take it, Sir, that this letter only proves one thing—namely that the Carter Medicine Company have decided to throw in their lot with the cutters; and it is certainly the duty of every self-respecting member of the trade to prove that his co-operation is worth having, and is not to be bought by such a one-sided offer as that referred to in the letter under consideration. I would like to draw your readers' attention to the letter of "Farmacista" in your last week's issue, and would say, "Go and do likewise." When this is done, the 40 per cent of the people who Mr. Brent Good, the proprietor of Carter's little liver-pills, says are sent away with other people's little liver-pills would be very much increased.

I am, yours, &c.,  
2 and 3 Stonecutter Street, E.C., W. S. GLYN-JONES.  
August 6.

P.S.—I would like to add that this letter is not written in my capacity as Secretary of the Proprietary Articles Trade Association.

SIR,—I think the Carter Pill Company is to be commended for raising the wholesale price of its pills. If other proprietors of patent medicines would follow its example the doom of the "cutters" would be sealed. It is lamentable to see how our leading houses play into the hands of these tradesmen. In a list I have before me I see Squire's chemical food 3s. 6d., "our price 2s. 7d."; Savory's infants' food 2s., "our price 1s. 4d."; Dinneford's magnesia 2s. 6d., "our price 1s. 7d." Surely if the proprietors of the above articles had really and truly the interest of the retail chemists at heart they would have found, long ere this, a means to put an end to such a scandal. That the Carter Company has hit the right nail on the head is evident by the threats of vengeance of the discomfited "cutters." Let other manufacturers only follow suit, and before many years are over the "cutting chemist will go down to the vile dust from whence he sprang." I need not finish the quotation.

Yours truly,  
West Brighton. S. J. WESTON.

#### Liquor Auri et Arsenii Bromatus.

SIR,—As the object of my note on the above subject appears to have been misunderstood in certain quarters,

\* Mr. Glyn-Jones's letter reached us just too late for our issue of August 8.



perhaps you will allow me a word by way of personal explanation.

About two years ago I was asked by one of our resident medical men, Mr. Wm. Armstrong, M.R.C.S., to prepare him a solution containing bromide of gold in conjunction with a liquor similar to the Clemens solution of the National Formulary, for use in neurotic cases.

Owing to certain practical difficulties which are referred to in the original M3S, I was led to discard the indirect process of the "Extra Pharmacopœia," and to adopt the direct process detailed in the note. In an article by Mr. Armstrong on "The Etiology and Therapeutics of Rheumatoid Arthritis," published in the *British Medical Journal* about three months ago, reference was made to the great value of a solution made by the above process in many cases of rheumatoid arthritis.

Since that time I have received orders for small quantities of the preparation from pharmacists in different parts of the country.

My object in publishing the formula was to put into the hands of such pharmacists the process which is in use here, and also to suggest to my colleagues on the Formulary Committee a basis upon which to work, should it at any time be thought desirable to publish an authoritative formula for the preparation.

Your correspondents will therefore see that I had no "axe of my own to grind" in connection with the subject. Pharmacists generally will feel indebted to them for the information as to where the true "arsenious oxybromide" having the proper formula is to be obtained, and when such "arsenious oxybromide" is ordered on any "medical prescription" coming into my pharmacy I can assure them that I personally, in common with other pharmacists, shall not fail to act upon the information they have so kindly and gratuitously supplied.

I am, Sir, yours faithfully,  
R. WRIGHT.

Buxton, August 12.

### LEGAL QUERIES.

142/24. *A. G. F.*—The clause that you shall "peaceably hold and enjoy the said demised premises" does not commit your landlord to the duty of fighting your neighbours in regard to alleged nuisances. We cannot advise you whether the circumstances you name would constitute a nuisance. This is a question of evidence and of local conditions, so that you should consult a neighbouring solicitor.

138/12. *Wanderer.*—Railway companies, as carriers of goods, are bound, in the absence of any special contract, to deliver the goods within a reasonable time. What is a reasonable time cannot be exactly defined, but depends upon the circumstances of the particular case. If the owner of the goods can prove that there is an unreasonable delay in delivering the goods, and that such delay is due to the default of the railway company, he can sue them for the damage caused to him by the delay; but he is not entitled to refuse to accept the goods when delivered and claim their value as if they had been lost, nor would the serving of any such notice as is suggested entitle him to do so.

143/51. *Morthol.*—The case you state has no bearing on the drug-trade. We do not see how you can have any claim on the banker, who appears to have done exactly what you asked him to do.

136/46. *Cochineal.*—(1) The Board of Inland Revenue have almost unlimited powers in regard to the prohibition of the use of methylated spirit for particular purposes; but we never heard of their objecting to its use in the manufacture of a furniture-polish such as the one given on page 93, July 18, 1896. You can make yourself quite safe by submitting the question. (2) The Board of Inland Revenue would have no objection to the use of the so-called methylated chloroform for the Pharmacopœia preparations. It is not, however, a strict compliance with the Pharmacopœia requirements.

125/56. *Leo.*—You can have your solicitor's bill taxed in the court, but you will have to pay the expense of the process unless you get more than one-sixth of the total disallowed. The expense of taxing will probably amount to some 2*l.* 2*s.*

144/6. *Pilula.*—You will find all we can say on the subject of little liver-pills in an editorial article published in our issue of March 21 last.

144/29. *Ignoramus.*—Registration at Stationers' Hall is only valid in regard to the copyright of some literary or artistic work. It is doubtful if it could protect you from imitations of your label, and it would certainly not secure for you a trade mark right.

145/31. *Alpha* asks: "Does a chemist (not on the Register of Dentists) infringe the Dentists Act by having in his shop window a card bearing the words, 'Teeth Skilfully Extracted'?"—In our opinion, No; but what can we say when we find that an experienced stipendiary magistrate holds that such designations as "popular dentistry," and "American artificial-teeth manufacturer" imply special qualifications?

133/65. *Nunquam.*—To register the design of a wrapper (by which we presume you mean an artistic work) you must copyright it. This is done at Stationers' Hall, London, E.C. Send there for a form, enclosing 2*d.*, and then enclose 5*s.* with the form filled up.

140/64. *Tyro.*—Several patents for powdered weed-killers have been granted. The earliest we trace was dated 1888. It was a compound of arsenic, sulphate of copper, caustic soda, saltpetre, sulphur, and sal ammoniac. This was granted to Messrs. Taylor, Murchison & Sharpe. The next, dated 1893, was an arsenical powder, and the patentee was W. J. Walmsley. We should very much doubt if the validity of either of the patents could be established, as there was, we think, no essential novelty in them.

We published a recipe on page 156, July 30, 1892, for a dentifrice said to have been a favourite with the Queen. Now *Gentian* (141/55) asks us if there would be any objection to his making a dentifrice from this formula and printing the words on his label, "As used by her Majesty the Queen." This seems to be a moral rather than a legal query, for we do not know of any statutory difficulty in the way. "Gentian" must ask his own conscience whether he has any intention of deceiving his customers.

### MISCELLANEOUS INQUIRIES.

128/11. *J. S.*—The only institution we know of suitable for the case you name is the National Hospital for the Paralysed and Epileptic, Queen Square, W.C. Beds are provided there both for free patients and for patients who pay 2*l.*s. weekly.

141/22. *John Giver.*—The next Preliminary examination will be held on Tuesday, October 13.

139/35. *H. H.*—Mr. Wanklyn informs us that he has no recollection of having specially reported on the relative hardness of Ennerdale water as compared with others. He thinks the paragraph you send is a garbled version of something in his book on water analysis.

137/23. *Ajax.*—Vaccination of dogs as a preventive of distemper has not hitherto been successful, and is not now practised except in the way of experiment. Lymph could not be bought for the purpose.



136/47. *R. W. B.*—You can imitate the veterinary lotion for curb, splints, &c., as follows:—

Pulv. cantharid. . . . .	℥ss.
Acet. opt. . . . .	℥j.

Macerate for a week, strain, and add—

Ol. tereb. . . . .	℥ss.
Ol. origani . . . . .	℥ij.

"Rub on well, but not to blister."

138/11. *Spermaceuti.*—Starch Glaze for using with cold water for steam-laundry purposes.—Try the following:—

	Oz.
P. boracis . . . . .	15
P. g. tragac. . . . .	1

Misce bene.

Use in the proportion of two teaspoonfuls to 1 lb. starch.

137/27. *R. E. B.*—We think it must be admitted that an unprejudiced jury would agree with the *Lancet* that it is a kind of presumption for a chemist to dispute with a duly qualified man on a question of diagnosis or treatment.

38/36. *Cosmo.*—You will get all the information we can give you if you refer to the advertisements in the *C. & D. DIARY*, classified in the *Bayers' Guide* under pill-machinery.

90/58 (*Nemo*), 103/18 (*A. P. S.*), 104/42 (*J. H.*), 130/49 (*Pestle and Mortar*).—Samples sent by these correspondents are among a lot which we fail to identify. If duplicates are sent the questions should be repeated, and the samples very distinctly labelled.

131/30. *David.*—Petroleum emulsion with hypophosphites.—See page 898, December 22, 1894.

124/13. *Lux.*—It is impossible to Deodorise Glacial Acetic Acid, but the substance may be disguised by the addition of any heavy strong-smelling oil, such as oil of amber, cajuput, citronella, or rose geranium. You would also find any of the benzols, petroleums, or trimethylamine answer the purpose.

136/61. *Victor.*—Varnish for Tipping Clay Pipes.—It is suggested that sealing-wax of the necessary colour dissolved in spirit would answer. A few experiments would soon show you if this suggestion, or your own of using water-glass, is any good.

136/44. *Cylos.*—Wills's "Manual of Practical Analysis," 2s. 6d. (Simpkin, Marshall & Co.).

124/20. *Amyas.*—Preservation of Cider.—We do not approve of salicylic acid as a preservative. Bisulphite of lime is what is generally employed for this purpose by cider-makers, also by brewers. You might use about  $\frac{1}{2}$  oz. of salicylic acid dissolved in brandy or spirit of wine to each hoghead. Burning brimstone in the cask previous to filling is also recommended. About 1 oz. of sulphur is sufficient for a hoghead.

122/4. *Analysis.*—Liquid for Preserving Milk, a tea spoonful to 15 gallons of milk.—Sample received is formalin—a solution of formaldehyde; see page 759, May 23, 1896. The other usual preservatives are boracic acid alone or in combination with borax, also salicylic acid. Various formulæ have been given in back numbers.

25/7/96 *Major Books.*—In addition to the books you name, you would do well to obtain Thorpe's "Metals and Non-metals" (Collins, 6s.), Meyer's "Outlines" (Longmans, 9s.), and "Pharmacographia" (Macmillan, 21s.)

139/17. *Institute.*—Our Educational Number, which will be published next month, will probably help you. There are classes at the Polytechnic which ought to be useful to you.

123/27. *W. F. N.*—White Slow Fire for Photographic purposes—Magnesium wire or oxy-hydrogen limelight is the most suitable.

123/22. *H. W.*—Carboy-colour, Pale Red.—See page 506, April 4, 1896; the pink one (cobalt) is a very pretty and a very permanent colour. Dilute to the required shade.

132/67. *J. Sid. M.*—For the ammonia preparations (toilet) see page 434, March 25, 1893, (household) see page 466, March 23, 1892, under title of "Lightning Renovator"; but instead of the glycerine use an equal quantity of petroleum spirit. See also page 760, May 23, 1896. For Brilliantine which will separate clear after shaking, use equal parts of castor oil and your own make of Eau de Cologne or any other perfume of about proof-spirit strength. Made with a highly rectified spirit perfume, separation does not take place.

## INFORMATION SUPPLIED.

For this section we are always glad to receive from subscribers brief notes on practical subjects, recipes which have been found good in practice or which have required modification, and hints or fresh ideas on any pharmaceutical or trade matter.

Psoriasis-ointment.—I send you a sample of ointment, almost a specific, for psoriasis—the formula as follows:—

Sodæ hypophosph. . . . .	℥j.
Acid. salicylic. . . . .	℥ss.
Adipis . . . . .	℥x.
Aq. . . . .	℥j.
Zinct oxid. . . . .	℥ij.
Acid. carbol. . . . .	℥ss.
Sulphur. precip. . . . .	℥j.
Pulv. quillaie . . . . .	℥ij.

M.

G. MILLIGAN.

71/96. *Haffenden's Tincture* is supplied by Barclay & Son. Cooley's "Cyclopædia" gives the following formula:—

	Fl. oz.
Tincture serpentary (double strength) . . . . .	1½
Comp. tincture benzoin . . . . .	1
Tincture of tolu . . . . .	½
Tincture of opium . . . . .	½

With rectified spirit q.s. to render the mixture bright should it turn milky.

—"Anat. of Quackery."

C. S. ASHTON.

129/32. *Liq. Hæmatox. Co.* may possibly be represented by mistura hæmatoxyli:—

Ext. logwood . . . . .	℥ij.
Boiling water . . . . .	℥vij.

Strain and add—

Tincture cinnamon . . . . .	5vj.
Tincture catechu . . . . .	℥ij.

Dose: ℥j.

—Beasley.

C. S. ASHTON.

129/32. The nearest pharmacopœial equivalent to *Liq. Hæmatox. Co.* would be dec. hæmatox. cono.—C. S. ASHTON.

Creaky Boots—The remedy of a deceased shoemaker was, "Wear them for a short walk upon a wet day."

W. BURT (Worthington).

## INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, postcard replies to the following:—

142/33. Maker of Gibson's gont pills and mixture.